



bulletin of undergraduate studies

LOWELL STATE COLLEGE

1972 - 1974



NOTICE TO STUDENTS:

The rules and regulations published in this bulletin were in effect at the end of the 1971-72 academic year and are subject to change through established procedures of the College. Changes in rules and regulations of an academic nature are effective at the beginning of the academic year following their adoption. Administrative regulations are subject to change without advanced notice and are effective immediately upon adoption should authorities responsible for the development of such policies determine immediate implementation to be necessary. Except as noted, published fees and tuition charges are effective for September, 1973, and are subject to change without notice by the Board of Trustees of the Massachusetts State Colleges. Listings of course offerings are subject to change by concerned departments and administrators of the College in the event that unforeseen faculty changes have taken place or insufficient numbers of students have subscribed to course offerings. Official listings of course offerings are provided in the Schedule of Semester Course Offerings which is published biannually by the Office of the Registrar for those periods designated for semester registration.



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Official publication of Lowell State College

Lowell, Massachusetts 01854

September, 1972



A MESSAGE FROM THE PRESIDENT

The Roman poet, Lucretius, has pictured the transmission of culture in terms of youthful runners in a stadium who pass flaming torches from hand to hand. "Et quasi cursores vitae lampada tradunt." The last three words of this hexameter form the motto of our College and symbolically sum up our goal - "They pass on the torch of life." May your education at Lowell State College inspire you to commitment to truth and to service to mankind.

Daniel D. O'Leary

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COLLEGE CALENDAR, 1972-1973

FALL SEMESTER

September	5	Tuesday	Freshman Orientation Begins
	6	Wednesday	Freshman Orientation Ends
	7	Thursday	Fall Classes Begin
	13	Wednesday	Last Day for Instructors to Publish Course Requirements
	20	Wednesday	Last Day to Add a Course Last Day for Students to Change Enrollment Status in "Pass" Courses (Credit-No Record Option)
October	4	Wednesday	Last Day for Students to Complete Work for Uncompleted Spring Semester (1972) Courses
	6	Friday	Last Day for Instructors to File Grades for Uncompleted Spring Semester (1972) Courses
			Last Day for Instructors to File Change of Course Grades for Spring Semester (1972) Courses
	9	Monday	Columbus Day--No Classes
	10	Tuesday	Pre-registration for Spring Semester (1973) Begins
	20	Friday	Pre-registration for Spring Semester (1973) Ends Last Day for Students to File for Equivalency Examinations for Spring Semester Courses
	23	Monday	Veterans Day--No Classes
	24	Tuesday	First Day for Students to Take Equivalency Examinations for Spring Semester Courses
November	10	Friday	Last Day for Instructors to Notify Students of "D" and "F" Midterm Records
	14	Tuesday	Last Day to Withdraw from a Course with "W"
			Last Day to Change "Credit" Status to "Auditor" Status
	16	Thursday	Last Day for Seniors to File Programs of Study for Graduation Approval
	23	Thursday	Thanksgiving Recess
	27	Monday	Classes Resume
December	1	Friday	Last Day for Seniors to Apply for National Teacher Examinations Last Day to Submit Fall Applications for Teacher-Education Programs.
	5	Tuesday	Last Day for Students to Take Equivalency Examinations for Spring Semester Courses
	6	Wednesday	Last Day for Instructors to File Grades for Equivalency Examinations for Spring Semester Courses
	7	Thursday	Registration for Spring Semester (1973) Begins
	14	Thursday	Last Day for Instructors to Give Course Evaluations Prior to Final Examinations
	20	Wednesday	Registration for Spring Semester (1973) Ends Last Day to Withdraw from Courses with Grade of "WP"
			Fall Classes End
	21	Thursday	Winter Recess Begins

COLLEGE CALENDAR, 1972-1973

January	2	Tuesday	Reading Day--No Classes
	3	Wednesday	Fall Examinations Begin
	12	Friday	Fall Examinations End

SPRING SEMESTER

January	27	Saturday	National Teacher Examinations - - Graduation Requirement for All Seniors in Teacher-Education Programs
	29	Monday	Spring Classes Begin
February	2	Friday	Last Day for Instructors to Publish Course Requirements First Day for Seniors to File for June Graduation
	9	Friday	Last Day to Add a Course Last Day for Students to Change Enrollment Status in "Pass" Courses (Credit-No Record Option)
	19	Monday	Washington's Birthday--No Classes
	26	Monday	Last Day for Students to Complete Work for Uncompleted Fall Semester (1972) Courses
	28	Wednesday	Last Day for Instructors to File Grades for Uncompleted Fall Semester (1972) Courses Last Day for Instructors to File Change of Course Grades for Fall Semester (1972) Courses
March	5	Monday	Pre-registration for Fall Semester (1973) Begins
	16	Friday	Pre-registration for Fall Semester (1973) Ends Last Day for Students to File for Equivalency Examinations for Fall Semester Courses Last Day for Students to File for Renewal of Financial Aid
	23	Friday	Last Day for Seniors to File for June Graduation
	24	Saturday	Spring Recess Begins
April	2	Monday	Classes Resume First Day for Students to Take Equivalency Examinations for Fall Semester Courses
	11	Wednesday	Last Day for Instructors to Notify Students of "D" and "F" Midterm Records
	13	Friday	Last Day to Withdraw from a Course with "W" Last Day for Students to Change "Credit" Status to "Auditor" Status
	16	Monday	Patriots Day--No Classes
May	1	Tuesday	Last Day to Submit Spring Applications for Teacher-Education Programs
	3	Thursday	Last Day for Students to Take Equivalency Examinations for Fall Semester Courses
	4	Friday	Last Day for Instructors to File Grades for Equivalency Examinations for Fall Semester Courses

COLLEGE CALENDAR, 1972-1973

May	7	Monday	Registration for Fall Semester (1973) Begins
	9	Wednesday	College Level Examination Program Begins for All Sophomore and Transfer Applicants to Teacher-Education Programs.
	10	Thursday	College Level Examination Program Ends for All Sophomore and Transfer Applicants to Teacher-Education Programs.
	11	Friday	Last Day for Instructors to Give Course Evaluations Prior to Final Examinations
	18	Friday	Spring Classes End Last Day to Withdraw from Courses with Grade of "WP" Registration for Fall Semester (1973) Ends
	21	Monday	Reading Day--No Classes
	22	Tuesday	Spring Examinations Begin
	28	Monday	Memorial Day--No Classes
June	1	Friday	Spring Examinations End
	10	Sunday	Graduation
	15	Friday	Last Day for Students to Secure Faculty Approval for Authorized Off-Campus Summer Study

COLLEGE CALENDAR, 1973-1974

FALL SEMESTER

September	6	Thursday	Freshman Orientation Begins
	7	Friday	Freshman Orientation Ends
	10	Monday	Fall Classes Begin
	14	Friday	Last Day for Instructors to Publish Course Requirements
	21	Friday	Last Day to Add a Course Last Day for Students to Change Enrollment Status in "Pass" Courses (Credit-No Record Option)
October	5	Friday	Last Day for Students to Complete Work for Uncompleted Spring Semester (1973) Courses
	8	Monday	Columbus Day--No Classes
	10	Wednesday	Last Day for Instructors to File Grades for Uncompleted Spring Semester (1973) Courses Last Day for Instructors to File Change of Course Grades for Spring Semester (1973) Courses
	15	Monday	Pre-registration for Spring Semester (1974) Begins
	22	Monday	Veterans Day--No Classes
	26	Friday	Pre-registration for Spring Semester (1974) Ends Last Day for Students to File for Equivalency Examinations for Spring Semester Courses
	29	Monday	First Day for Students to Take Equivalency Examinations for Spring Semester Courses

COLLEGE CALENDAR, 1973-1974

November	14 Wednesday	Last Day for Instructors to Notify Students of "D" and "F" Midterm Records
	16 Friday	Last Day for Seniors to File Programs of Study for Graduation Approval
	22 Thursday	Thanksgiving Recess
	26 Monday	Classes Resume
	29 Thursday	Last Day for Student to Take Equivalency Examinations for Spring Semester Courses
	30 Friday	Last Day for Instructors to File Grades for Equivalency Examinations for Spring Semester Courses Last Day for Seniors to Apply for National Teacher Examinations Last Day to Submit Fall Applications for Teacher -Education Programs
December	3 Monday	Registration for Spring Semester (1974) Begins
	14 Friday	Last Day for Instructors to Give Course Evaluations Prior to Final Examinations Registration for Spring Semester (1974) Ends
	21 Friday	Fall Classes End Last Day to Withdraw from Courses
	22 Saturday	Winter Recess Begins
January	2 Wednesday	Reading Day--No Classes
	3 Thursday	Fall Examinations Begin
	12 Saturday	Fall Examinations End

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SPRING SEMESTER

January	28 Monday	Spring Classes Begin
February	1 Friday	Last Day for Instructors to Publish Course Requirements Last Day for Seniors to File for Graduation
	8 Friday	Last Day to Add a Course Last Day for Students to Change Enrollment Status in "Pass" Courses (Credit-No Record Option) First Day for Seniors to File for June Graduation
	18 Monday	Washington's Birthday--No Classes
	26 Tuesday	Last Day for Students to Complete Work for Uncompleted Fall Semester (1973) Courses Last Day for Seniors to File for June Graduation
	28 Thursday	Last Day for Instructors to File Grades for Uncompleted Fall Semester (1973) Courses Last Day for Instructors to File Change of Course Grades for Fall Semester (1973) Courses

COLLEGE CALENDAR, 1973-1974

March	4	Monday	Pre-registration for Fall Semester (1974) Begins
	15	Friday	Pre-registration for Fall Semester (1974) Ends Last Day for Students to File for Equivalency Examinations for Fall Semester Courses Last Day for Students to File for Renewal of Financial Aid Spring Recess Begins
	23	Saturday	
April	1	Monday	Classes Resume First Day for Students to Take Equivalency Examinations for Fall Semester Courses
	3	Wednesday	Last Day for Instructors to Notify Students of "D" and "F" Midterm Records
	6	Saturday	National Teacher Examinations--Graduation Requirement for All Seniors in Teacher-Education Programs
	15	Monday	Patriots Day--No Classes
May	1	Wednesday	Last Day to Submit Spring Applications for Teacher- Education Programs
	2	Thursday	Last Day for Students to Take Equivalency Examinations for Fall Semester Courses
	3	Friday	Last Day for Instructors to File Grades for Equivalency Examinations for Fall Semester Courses
	6	Monday	Registration for Fall Semester (1974) Begins
	14	Tuesday	Last Day for Instructors to Give Course Evaluations Prior to Final Examinations
	15	Wednesday	College Level Examination Program Begins for All Sophomore and Transfer Applicants to Teacher- Education Programs
	16	Thursday	College Level Examination Program Ends for All Sophomore and Transfer Applicants to Teacher- Education Programs
	17	Friday	Registration for Fall Semester (1974) Ends
	20	Monday	Spring Classes End Last Day to Withdraw from Courses
	21	Tuesday	Reading Day--No Classes
	22	Wednesday	Spring Examinations Begin
	27	Monday	Memorial Day--No Classes
June	1	Saturday	Spring Examinations End
	14	Friday	Last Day for Students to Secure Faculty Approval for Authorized Off-Campus Summer Study

EXAMINATION SCHEDULE -- 1972 - 1974

Course Time	Exam Time	Fall 1972	Spring 1973	Fall 1973	Spring 1974
MWF 8:00 TTh 8:30	9:00-12:00 1:30- 4:30	Jan. 3 Wednesday	May 22 Tuesday	Jan. 3 Thursday	May 22 Wednesday
MWF 9:00 TTh 10:00	1:30- 4:30 9:00-12:00	Jan. 4 Thursday	May 23 Wednesday	Jan. 4 Friday	May 23 Thursday
MWF 10:00 TTh 11:30	9:00-12:00 1:30- 4:30	Jan. 5 Friday	May 24 Thursday	Jan. 7 Monday	May 24 Friday
MWF 11:00 TTh 1:00	1:30- 4:30 9:00-12:00	Jan. 8 Monday	May 25 Friday	Jan. 8 Tuesday	May 28 Tuesday
MWF 12:00 TTh 2:30	9:00-12:00 1:30- 4:30	Jan. 9 Tuesday	May 29 Tuesday	Jan. 9 Wednesday	May 29 Wednesday
MWF 1:00 TTh 4:00	1:30- 4:30 9:00-12:00	Jan. 10 Wednesday	May 30 Wednesday	Jan. 10 Thursday	May 30 Thursday
MWF 2:00 MWF 4:00	9:00-12:00 1:30- 4:30	Jan. 11 Thursday	May 31 Thursday	Jan. 11 Friday	May 31 Friday
MWF 3:00 Multi-section	1:30- 4:30 9:00-12:00	Jan. 12 Friday	June 1 Friday	Jan. 12 Saturday	June 1 Saturday

In the event that an examination day is cancelled because of a snowstorm, examinations scheduled for the period through Friday, January 5, 1973, and January 4, 1974, will be given on Saturday, January 6 of the Fall, 1972, semester and Saturday, January 5 of the Fall, 1973, semester. Additional cancelled examinations will be respectively scheduled for the initial days of the inter-semester periods.



GENERAL COLLEGE INFORMATION

HISTORY OF THE UNDERGRADUATE COLLEGE

Lowell State College was established by an act of the General Court of the Commonwealth on January 6, 1894. Reflecting the educational philosophy and objectives of the late nineteenth century, the institution so created was named the Massachusetts State Normal School at Lowell and was charged with developing a two-year program in elementary education which would provide "the most thorough knowledge of the branches of learning required to be taught in the schools, the best methods of teaching these branches, and right mental training." The scope of the curriculum was expanded in 1912 when a three-year program in music education was initiated, and in 1927 the curriculum in elementary education was similarly extended. One year later, the program in music education was expanded to four years, and in the following year, the first baccalaureate degree was granted in music education. In 1932, the institution was made a four-year college and became the State Teachers College at Lowell with the right to confer the baccalaureate degree in both elementary and music education. In September, 1959, the College received permission to offer curricula in secondary education and in the following year to initiate programs in the liberal arts. From 1960-1967, the institution was designated the Massachusetts State College at Lowell. By direction of the General Court in 1967, the College was renamed as Lowell State College. At the present time, the College is authorized by the Board of Trustees of the Massachusetts State Colleges to offer baccalaureate majors in the following subject areas: American Studies, Art, Biology, English, Environmental Science, History, Mathematics, Modern Languages (French and Spanish), Music, Medical Technology, Nursing, Philosophy, Political Science, Psychology, and Sociology. Teaching programs are also authorized for Elementary Education, Music Education, and Secondary Education.

PURPOSE OF THE COLLEGE

Since this institution opened its doors as a normal school on October 4, 1897, it has been charged with the education and preparation of teachers for the schools of the Commonwealth of Massachusetts. Although this charge remains an important responsibility of the College, Chapter 73 of the General Laws of the Commonwealth (1965) has directed Lowell State College "to provide educational programs, research, extension, and continuing educational services in the liberal, fine and applied arts and sciences, and other related disciplines through the master's degree level." Accordingly, the College recognizes the importance of its role as a multi-purpose institution, and it has sought not only to strengthen its teacher-education programs but also to develop strong programs in the liberal arts, medical technology, and nursing.

LOCATION OF THE COLLEGE

Lowell State College is located twenty-five miles northwest of Boston and is situated on a thirty-acre campus in the northwestern periphery of the City of Lowell. The College campus, which has a commanding view of the Merrimack River, is easily accessible to Route 3 and to Interstate Routes 93 and 495.

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ACADEMIC STATUS OF THE COLLEGE

Lowell State College is a fully accredited member of the New England Association of Schools and Colleges. Baccalaureate programs in Elementary Education, Music Education, and Secondary Education are accredited by the National Council for the Accreditation of Teacher Education. Accreditation indicates that this College is recognized and approved by the major regional and national associations concerned with the quality of higher education, and it assures that study undertaken here has transfer value to other accredited institutions of higher education. The College is also a member in good standing with the American Association of Colleges for Teacher Education and the Association of State Colleges and Universities. The Department of Music is an associate member of the National Association of Schools of Music. and Music programs at both the undergraduate and graduate levels are accredited by the Association.



PROJECTED COLLEGE CAMPUS

(1971-1976)

1. Humanities Building
2. Maintenance Facility
3. Education Building
4. Administration Building
5. Dining Hall
6. Tennis Courts
7. Faculty Center
8. Nursing and Science Building
9. Concordia Hall
10. Fine Arts Building #
11. Library
12. Student Union
13. Classroom Buildings*

Under Construction

*Proposed

FACILITIES OF THE COLLEGE

ADMINISTRATION: Located in the center of the campus, this building houses the offices of the President, the Academic Dean, the Graduate Dean, the Director of Admissions, the Director of Fiscal Affairs, the Director of Financial Aid, the Placement Office, and the administrative staff. This building also contains classroom facilities, a closed-circuit television studio, language laboratories, music and art studios, and Art Department offices.

CONCORDIA HALL: Housing for 180 women students is provided in this dormitory structure which contains 90 single and 45 double rooms. Also in this building are the offices of the College Counseling Service.

DINING HALL: This building, adjacent to the Nursing and Science Building, contains two student dining halls and a cafeteria facility.

EDUCATION: This three-storied building is the oldest campus structure and contains classrooms, the College Bookstore, the Campus Police Department, and offices of the Departments of Education, Land History and Political Science.

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FACULTY CENTER: This building, the former Governor Allen estate, houses faculty offices and a conference facility for general faculty use.

FACULTY OFFICE BUILDINGS: Several departments are located in quarters which are separate from major campus buildings. The Department of Languages is located at 66 Wilder Street, the Sociology staff of the Department of Behavioral Sciences at 90 Wilder Street, the Department of Mathematics at 94 Wilder Street, and the Psychology staff of the Department of Behavioral Sciences at 100 Wilder Street.

MUSIC: Offices of the Department of Music, music classrooms, studios, and an auditorium suitable for symphonic and operatic productions are the basic facilities of this building for which construction was initiated in the spring of 1973.

HUMANITIES: This building consists of a central structure and two wings. The central part contains physical science and psychology laboratories, classrooms, the Office of the Registrar, and offices of the Physical Science staff

of the Department of Science. One wing contains the College gymnasium, offices of the Department of Physical Education, and the Health Service Office. The other wing houses the Little Theatre and a theatre-arts workshop.

LIBRARY BUILDING: In addition to the usual areas for books and for study, this building houses a bindery, rooms for special collections, two large lecture halls, typing rooms for students and faculty members, a comprehensive media center, and offices of the Department of English.

NURSING AND SCIENCE BUILDING: This facility contains three large lecture halls, science and nursing classrooms, biology and chemistry laboratories, a botanical greenhouse, and offices of the Department of Nursing and the Biology and Chemistry staffs of the Science Department.

STUDENT UNION: This facility contains a faculty lounge, student lounge and recreation areas, offices and meeting rooms for student and alumni organizations, sculpture and photography studios of the Department of Art, and music practice cubicles.





UNDERGRADUATE ADMISSION POLICIES

GENERAL POLICIES

Admission to Lowell State College is made only through the Office of Admissions and in accordance with the policies described below. Specific admission status as a part-time or non-matriculating student is granted only under provisions governing programs for talented high-school seniors and students who are matriculating for degrees at other baccalaureate institutions. Students who are admitted to the College for the purposes of matriculating for a Lowell degree are not admitted with "conditions." Preference for admission to the College is granted to full-time, matriculating students. Part-time and non-matriculating students are admitted to the College only when facilities of the College are not fully committed to full-time, matriculating students.

Throughout the admission's process, each applicant is evaluated on the basis of his individual promise as a student and as a person. Recognition is given to honors courses in evaluating grades, but the Office of Admissions is equally interested in subjective evaluations and thus solicits careful reports from counselors, teachers, and staff officers who are personally acquainted with applicants. Through the faculty interviews and school reports, the Office of Admissions seeks information on the whole range of interests and accomplishments of applicants. Whether these be artistic, athletic, dramatic, literary, musical, scientific, or a variety of other talents, the Office of Admissions seeks promising students whose presence on the campus will be mutually enriching. Strength of character, perseverance, and maturity are highly desired, especially as they give indications of the leadership potential so vital to those professions for which Lowell State College prepares.

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It is the policy of the Board of Trustees of the Massachusetts State Colleges that students seeking admission to state colleges will be evaluated on their merits without respect to their race, color, creed, natural origin, age, or sex, as prescribed in applicable federal and state law. Lowell State College makes a special attempt to attract students from various racial backgrounds in disadvantaged environments through cooperation with such programs as METCO and ODWIN.

An applicant who has been approved by the College for admission is required to notify the Office of Admissions within one month of the date of receipt of his

letter of approval that he intends to accept admission, that he wishes to delay replying to the offer of admission until the Candidate Reply Date of May 1, or that he will not accept admission. Applicants who delay their replies until May 1 are advised that the College cannot guarantee dormitory reservations beyond one month from the date of admission acceptance. Students who fail to notify the College of their acceptance of admission within the required period will have their names removed from the list of accepted applicants.

APPLICATION PROCEDURES FOR MATRICULATING STUDENTS

Application Procedures for Graduating High School Seniors and High School Graduates

18 Graduating high school seniors and high school graduates who wish to be admitted to the College as matriculating students should (1) complete prior to March 1 the common application form in use by the Massachusetts State College System, (2) request high school principals or guidance directors to forward to the Office of Admissions personal character ratings and transcripts of secondary school grades - - including grade reports for at least the first quarter of the senior year, (3) complete the College Board Student Descriptive Questionnaire, and (4) arrange to take the College Entrance Examination Board Scholastic Aptitude Tests. Detailed information concerning the College Entrance Examination Board tests and the dates throughout the year on which they will be given may be secured from the Office of Admissions of Lowell State College, high school principals or guidance directors, or the Educational Testing Service, Princeton, New Jersey. Special information is provided in the following sections concerning required aptitude examinations for applicants to music programs and satisfaction of departmental language requirements through the Foreign Language Achievement Tests of the College Entrance Examination Board. Following receipt of application forms, transcripts of high school records, and scores on the Scholastic Aptitude Tests, the Office of Admissions will arrange appointments for personal interviews of applicants.

SECONDARY SCHOOL PREPARATION

The College desires applicants to present course work which has been undertaken within college preparatory curricula, but it considers the quality of the applicant's record to be more important than the completion of prescribed preparatory programs. No specific course work is prescribed for admission to the College, but applicants who wish to concentrate in English or History are

advised to present two units of course work in a single classical or modern foreign language which is suitable to their intended area of concentration. Students who wish to major in Biology, Medical Technology, and Nursing are advised to present biology and chemistry as part of their secondary school course work. Students intending to major in French or Spanish are advised to present four units of high school course work in their intended major language. Students who wish to pursue programs in the Department of Mathematics are advised to present units in algebra, geometry, and trigonometry. Failure to present recommended course work will not prohibit enrollment for designated programs, but it may require additional studies in the College beyond the basic recommendations of major programs.

REQUIRED ADMISSIONS EXAMINATIONS

All applicants for admission to the College as degree candidates are required to take the Scholastic Aptitude Tests of the College Entrance Examination Board. Achievement Tests are not required for admission, but the College may require accepted students to take College Entrance Examination Board's Achievement Tests, College Level Examination Program (CLEP) tests, or departmental examinations for purposes of placement or advanced standing with credit. Students who wish to apply for music programs offered by the College are required to achieve satisfactory scores on written tests of musical aptitude and basic music theory which are developed and administered by the Music Department. Such students are also required to demonstrate their vocal or instrumental ability during a jury examination before a committee of music instructors. Music aptitude and performance tests are given by the Music Department on four different occasions during the college year. Applicants will not be invited to take the special tests at the College until all their credentials have been approved by the Office of Admissions.

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Applications Procedures for Non-Graduates of High Schools

Applicants who have not graduated from high school may be admitted to the College upon satisfactory completion of the General Educational Development tests and receipt of a certificate of high school equivalency. Such students are required to take the Scholastic Aptitude-Tests of the College Entrance Examination Board prior to their application and to have presented scores which are acceptable to the College. Admissions procedures for students possessing certificates of high school equivalency are the same as those which are prescribed for graduating seniors and high school graduates.

Application Procedures for Transfer Students

20 The Massachusetts State College System has affirmed its intent to maintain flexibility in the transfer of qualified students. For the implementation of this objective, the Massachusetts State College System has established the following guidelines and priorities: (1) Applicants for transfer to any college in the Massachusetts State College System will be evaluated for admission on the basis of their previous college academic record. Such students need not provide high school records or College Board scores for transfer purposes. (2) The Massachusetts State College System will accept credits of a "C" or better earned in equal or comparable courses at institutions of public higher education in the Commonwealth. Maintenance of a "C" average does not insure transfer to a State College. (3) Whenever possible, degree credit will be granted for course work completed at Massachusetts institutions of public higher education. Courses which do not fit the degree program may be counted as fulfilling the open elective requirements of the four-year curriculum. The transfer student will be required to fulfill the same degree requirements as any other student. (4) Honors courses, programs of independent study, or Advanced Placement and College Level Examination Program (CLEP) advanced standing credit earned at another Massachusetts institution of public higher education will be accepted at any State College. (5) A student must successfully complete a minimum of one year as a full-time student to receive a baccalaureate degree from any State College. (Students desiring to transfer to the College for the program in Medical Technology are advised that the year of clinical internship does not satisfy the residency requirement and that applications for transfer will not be accepted for the senior year.) (6) The number of transfers accepted by each State College will be determined by existing vacancies in the various degree programs and the number of applicants determined eligible under the above guidelines. Among qualified and eligible transfer applicants, priority will be given to transfer students from institutions of public higher education in Massachusetts.

Preference for admission to the College is based upon the record of each individual transfer applicant as of the end of the semester preceding admission and within the above priority policy, but the final deadlines for transfer application are **April 1** for fall-semester and **December 1** for spring-semester admissions. All existing transfer credits must be presented to the College at the time of application for transfer, and under no circumstances will the College consider course work undertaken by the student prior to admission which is presented after his transfer to the College. The maximum number of credits acceptable to the College from non-baccalaureate institutions is 60 semester

hours. It is the responsibility of the student seeking transfer for arranging with the institution in which his previous course work was taken to forward to the Registrar no later than July 1 for fall-semester admissions or January 15 for spring-semester admissions an official transcript of his total academic record. Students who fail to comply with this regulation will not be permitted to register for course work at the College.

In general, Lowell State College will accept on an hour-for-hour basis credit as shown on official transcripts of record received directly from other accredited collegiate institutions. In all cases, the transferred credit accepted by Lowell State College is subject to review by the student's intended major department with reference to its applicability toward specific major course requirements and distributions. Discrepancies between the number of hours required by the College for the Uniform College Requirements and the number of related course credits which a student presents at the time of transfer will be resolved through consultation of department chairmen with the Academic Dean. In conformity with the transfer policies of the Massachusetts State College System, course credits presented by individual students which are unacceptable to the College for the purposes of satisfying the requirements of major studies or the distribution areas of the Uniform College Requirements will be credited wherever possible within the provisions of specific baccalaureate programs for "Additional General Education Requirements" and unrestricted elective courses. Acceptance as a transfer student does not guarantee admission to teacher-education programs or to other professional curricula for which specific admission standards and quotas have been established. Applicants for admission to the College as matriculating students who present fewer than 15 semester hours of course work are not admitted within the above provisions governing transfer and are subject to the application procedures for graduating high-school seniors and high-school graduates.

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Course work completed at non-public institutions of the Commonwealth which are not accredited by the major regional accrediting associations may not be credited to degree programs of Lowell State College. Nor may course work of a non-matriculated nature, course work completed through extension or adult-enrichment programs, course work completed within an accredited institution's associate degree programs which is unacceptable to the institution for its own baccalaureate programs, course work taken in post-secondary school diploma programs, and course work which has been taken more than seven years prior to the date when a student applies for transfer be credited to baccalaureate programs of the College. However, such competencies as may have been achieved by a student through course work which is unacceptable for regular

transfer may be recognized by the College through procedures for advanced placement with course credit through examinations.

A student who presents no more than 60 semester hours of course work for transfer to Lowell State College and who wishes to undertake authorized off-campus summer school course work must comply with the regulations currently in effect for matriculating students of the College. Students who are interested in undertaking summer-school course work prior to their attendance at Lowell State College should write to the Registrar, Lowell State College, Lowell, Massachusetts 01854 for established procedures and deadlines.

POLICIES CONCERNING DEGREE MATRICULATION

Students entering the College as matriculating students are not required to make a declaration of major concentration(s) or specialization until the end of their sophomore year (or upon the completion of 59 semester hours). However, matriculation status requires a student to pursue a course of study which is appropriate to those baccalaureate degree programs which are offered by Lowell State College. Specifically, a matriculating student is required to pursue course work which is in conformity with the Uniform College Requirements for Undergraduate Study and upon his declaration of major concentration(s) or specialization to pursue course work which is in conformity with the requirements of his declared major(s) and his baccalaureate degree.

Matriculating students are not admitted to the College with "conditions," such admission being permitted only for non-matriculating students. Matriculation may be established by full-time students only and may not be pursued for periods in excess of ten years without the authorization of the Academic Standards Committee. The professional nursing curriculum must be completed within seven years and is not extendable. Students in good standing whose matriculation status is interrupted for periods of two or more continuous semesters are readmitted with the understanding that reinstatement is granted subject to the rules and regulations governing degree requirements which are in effect at the time of readmission rather than at the time of original admission. Admission to the College as a matriculating student does not guarantee admission to baccalaureate programs for which specific qualitative requirements or quotas have been established. For information concerning admission to teacher-education programs consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for Education.

POLICIES FOR FULL-TIME STUDENTS

Normally, a full-time student must be admitted as a candidate for a baccalaureate degree of the College, but students who wish to satisfy degree requirements of other baccalaureate institutions through one or two semesters of full-time study at Lowell State College may be permitted to do so within the limits of classroom space and course subscriptions. For regulations governing course loads of full-time students, see the statement concerning "Course Load Policies" which appears elsewhere in this catalogue under the heading for Undergraduate Academic Policies.

Scholarship, work-study, and loan programs are limited to candidates for baccalaureate degrees of the College. Students participating in such programs are required to complete a minimum of twelve hours of course work each semester in accordance with the grade-point expectations established for class levels and major studies. Students who fail to maintain required grade-point averages or who carry less than the minimum number of hours required for full-time studies forfeit their rights to participation in all such programs.

Full-Time Programs for Students Matriculated at Other Colleges

Students who wish to satisfy degree requirements of other baccalaureate institutions through one or two semesters of full-time study at Lowell State College are admitted for periods not to exceed two continuous semesters and are granted class standing in accordance with their status at their matriculating colleges. Prior to attendance at Lowell, such students are advised to develop courses of study with appropriate authorities of the colleges where their degrees will be granted and to inquire of the Office of Admission at Lowell if projected courses of study will be possible. Permission to enroll in courses at Lowell will not be granted without a letter from an appropriate officer of the student's college which certifies that he is a matriculating student in good academic standing. Professional courses in teacher-education, except courses in the Foundations of Education, are open only to qualified, full-time, matriculating students of Lowell State College.

Full-Time Programs for Candidates for a Second Degree

Students who have earned baccalaureate degrees at Lowell State or other accredited baccalaureate institutions may be admitted to pursue course work for an additional baccalaureate degree. Such students must pursue studies which are clearly distinct from those delimited by the major concentrations of

their initial baccalaureate programs, must comply with the regulations of the Uniform College Requirements, and must satisfy both the prerequisite and major course requirements of their baccalaureate programs at Lowell State College. In order to qualify for a second baccalaureate degree, all students must satisfy the basic residency requirement of one year of full-time studies and must be in residence for both semesters of their final year. They may not present equivalency credit in satisfying the residency requirement of one year of full-time studies or in reducing the basic course requirement of 9 semester hours in the major department. Candidates for second degrees are subject to the general regulations of the College and pay the regular tuition fees plus all specified fees applicable to their programs of study.

POLICIES FOR PART-TIME STUDENTS

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Admission as a non-matriculating student is granted under provisions governing programs for talented high-school seniors and students who are matriculating for degrees at other baccalaureate institutions. Such admission is extended for a period of one semester only and solely for courses designated at the time of application. A student who wishes to continue his enrollment as a non-matriculating student must apply each semester to the Office of Admissions. Readmission to the College is ordinarily granted to such students when the following conditions are satisfied: (1) the student has satisfactorily completed his previously attempted course work, (2) the policies under which he pursues his part-time studies permit continued part-time enrollment, and (3) commitments of the College to full-time and matriculating students permit enrollment of part-time students.

Regular College fees as outlined for part-time students are assessed at the time students are admitted to the College and include a tuition fee, a library fee, and laboratory fees as applicable. Applicants for admissions to the College as part-time, non-matriculating students are not required to present CEEB Scholastic Aptitude Test scores. Nor are they required to file an official copy of their high school transcript or of their high school equivalency. Grades and course credits will be recorded on the permanent record card of the student for all attempted course work in accordance with the grading system of the College and will appear on any official transcript issued to or for him. In the event that a student who has completed course work at the College under the policies for part-time, non-matriculated course work is accepted as a matriculating student, all satisfactorily completed courses will be reviewed by concerned academic departments of the College for credit toward the baccalaureate degree. Evaluation of such course work by concerned departments is subject to

the regulations of the College which are in effect at the time of a student's acceptance as a matriculating student.

Part-Time Programs for Talented High School Seniors

Under certain specified conditions, talented high school seniors are permitted to enroll in the College as part-time, non-matriculating students. To qualify for part-time studies, such students must be recommended by their high school principals and must have achieved by the end of their junior year minimum grade-point averages which are equivalent to the letter grade of "B+". Each case of a part-time admission of a senior high school student is considered individually on its own merits and the Office of Admissions and the department offering the course desired by the student must concur with the high school principal's recommendation. Applications for admission under the provisions of policies for part-time enrollment of talented high school seniors should be submitted to the Office of Admissions according to the schedule established specifically for this purpose.

Part-Time Programs for Students Matriculated at Other Colleges

Students who are matriculants for degrees at other baccalaureate institutions may be admitted to Lowell State College to pursue specifically authorized course work. Such students are admitted to the College on a semester by semester basis and must secure prior approval for Lowell State College courses from appropriate authorities at colleges where their degrees will be granted. Permission to enroll in courses of the College will not be granted without a letter from an appropriate college officer which certifies that the student is matriculating for a baccalaureate degree and is in good academic standing. Professional courses in teacher-education, except courses in the Foundations of Education, are open only to qualified, full-time, matriculating students of Lowell State College.

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CROSS-REGISTRATION POLICIES FOR STUDENTS OF LOWELL TECHNOLOGICAL INSTITUTE

Full-time, matriculating students of Lowell Technological Institute may cross-register for courses subject to the priority of matriculating students of the College. Students of the Institute wishing to cross-register for course work at the College must satisfy any course prerequisites specified in the most recent issue of the **Bulletin of Undergraduate Studies**, must secure the approval of the concerned deans of the Institute, and must file with the Office of the Registrar of

the College a completed “LSC-LTI Registration Form” prior to the established deadline for adding a course. Students of the Institute who cross register for course work are required to comply with the schedule of class meetings and examinations of the College. At the end of each semester, the Registrar of the College notifies each student by mail of the grades he has been assigned and forwards an official grade report to the Registrar of the Institute, who is solely responsible for issuing any official transcript to or for the student. Subject to reciprocity agreements between the College and the Institute, tuition fees are not levied for full-time matriculating students of the Institute. Laboratory fees must be paid by students of the Institute when they cross-register for courses which require such fees.

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Course offerings in Education generally are not available to students of the Institute through cross-registration, except that FE 301 - - Philosophy of Education may be elected when course enrollments permit. Students of the Institute majoring in mathematics and science areas may petition for admission to Secondary Education programs in Mathematics Education and Science Education at the end of their sophomore year. Such students must comply with the “Academic Policies Concerning Teacher-Education Programs” and the “Curriculum Requirements for Secondary Education” which appear elsewhere in this catalogue under the heading for **Education**. Priority for admission to programs in Mathematics Education and Science Education will be given to qualified students of the College in the event that program quotas must be established. Students of the Institute who have been admitted to programs in Mathematics Education and Science Education are required to undertake course work in Education in accordance with the established sequence of courses for Secondary Education curricula and to comply with the schedule of course offerings. Students of the Institute who have been admitted to programs in Mathematics Education and Science Education will receive the same consideration as students of the College in preregistering for required course work.

ADVANCED PLACEMENT WITH COURSE CREDIT THROUGH EXAMINATIONS

Advanced placement with college credit and reduction of distributions of the Uniform College Requirements are granted upon the recommendations of the several collegiate departments to entering students who have demonstrated college-level proficiency through established procedures.

Students entering the College as freshmen or as transfer students may elect to

challenge General Education courses of the Uniform College Requirements through the general and/or subject examinations of the College Level Examination Program (CLEP), the Advanced Placement Examinations of the College Entrance Examination Board, the Achievement Tests in foreign languages of the College Entrance Examination Board, and foreign language achievement tests administered by the Department of Languages of Lowell State College.

1. College Level Examination Program

a. General Examinations

Students may be granted college credit for scores of "500" or better on the following basis:

CLEP EXAMINATION	CREDIT ALLOWED	AREA OR COURSE EQUIVALENT
*English Composition	3 sh	English Composition
Social Sciences	6 sh	Area I (Social Sciences)
Humanities	6 sh	Area II (Humanities)
Mathematics	6 sh	Area III (Symbolics)
Natural Sciences	6 sh	Area IV (Laboratory Science)

*English Composition will be credited toward the Area III requirement for students who have not received credit for the mathematics examination. Students who have received Area III credit for the mathematics examination and who have satisfactorily completed the English composition examination will have the appropriate composition credits counted within the Additional General Education Requirements.

b. Subject Examinations

Students may be granted college credit for subject examinations of the College Level Examination Program when they have achieved scores which are on or above the "C" grade level. (Cf. policies governing "Course Equivalency Procedures" which appear elsewhere in this catalogue under the heading for Undergraduate Academic Policies.)

2. Advanced Placement Examination of the College Entrance Examination Board

College credit and reduction of distributions of the Uniform College Requirements are granted upon the recommendations of the several collegiate departments to entering students who have demonstrated college level proficiency through Advanced Placement Examinations of the College Entrance Examination Board. College credit generally will be given for scores of "5," "4," and "3". Credit will not be given for scores of "2" or "1" although advanced placement without credit may be recommended by departments when this appears to be in the best interest of the student.

3. Foreign Language Achievement Tests of the College Entrance Examination Board

College credit and reduction of distributions of the Uniform College Requirements are granted upon the recommendations of the Department of Languages to entering students who have demonstrated satisfactory language competency through the Language Achievement Tests of the College Entrance Examination Board. College credit on the intermediate level will be given to students achieving scores of "550" or better. Such credit will satisfy any language proficiency requirement specified for concentrators by their major departments.

4. Foreign Language Achievement Tests Administered by Department of Languages

College credit and reduction of distributions of the Uniform College Requirements are granted to entering students who have demonstrated satisfactory language competency through reading examinations in foreign languages which have been administered by the Department of Languages. College credit on the intermediate level will be given to students achieving satisfactory scores in tests of foreign languages which are offered by Lowell State College. Such credit will satisfy any language proficiency requirement specified for concentrators by their major departments.

28 COURSE CREDIT LIMITS THROUGH EQUIVALENCY AND TRANSFER PROCEDURES

The maximum number of credits which may be granted through course equivalency procedures (departmental examinations, general and subject examinations of the College Level Examination Program, Advanced Placement Examinations of the College Entrance Examination Board, and any other testing program approved by the College) and course transfer is 90 semester hours. Under no circumstances will duplicating examination credit be granted to students who present formal course work for transfer. Nor will examination credit be granted to transferring seniors for the purposes of reducing the senior residency requirement.

At least 9 semester hours of course credit must be undertaken in regular classroom courses at the College which are offered by the student's major

department. Students electing to complete more than one major are required to satisfy the classroom course requirement for each major area elected. Medical Technology candidates who have received paramedical training in the Armed Forces and who have been granted 30 or more credits through equivalency procedures may petition the Academic Standards Committee for a waiver of this requirement. Such petition must be submitted no later than the last Friday of December for spring semester registration and no later than the last Friday of June for fall semester registration.

RESIDENCY AND ACHIEVEMENT REQUIREMENTS FOR TRANSFER AND ADVANCED PLACEMENT STUDENTS

All students entering the College through transfer or with advanced standing must fulfill a minimum residency requirement of one year of full-time study (not less than 15 hours per semester) and must be in residence for both semesters of their senior year. Students who are admitted to junior-class standing through policies for advanced placement with college credit or through transfer policies must maintain 2.00 cumulative averages during each of their junior and senior years and must attain at least 2.20 averages in their major studies by the end of their senior year.

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FACULTY ADVISORS

All freshmen and transfer students must report to the Registrar to select faculty advisors within the first month of classes. The faculty advisor is responsible for developing with the student his academic schedule during each registration period, formulating a program of study leading to a degree, approving changes in academic programs, and generally providing whatever guidance and assistance a student may require in making appropriate academic decisions. Faculty advisors are selected on the basis of the student's declaration of major academic concentration or specialization. In certain cases, students will be assigned new advisors at the beginning of their junior year when they initiate professional course sequences. In such cases, the responsibility for approval of a student's program of study shall rest with the final advisor. Students must secure "Program of Studies" forms from the Registrar.



UNDERGRADUATE FINANCIAL INFORMATION

COLLEGE EXPENSES*

For Entering Students Only (one-time charge):

Application Fee (to accompany application)	\$10.00
Acceptance Fee (credited to tuition)	50.00

For All Students of the College (annual charges):

Full-Time Tuition (residents of Massachusetts)	300.00
Full-Time Tuition (non-residents of Massachusetts)	600.00
Part-Time Tuition (per credit hour for residents of Massachusetts) +	7.00
Athletic Fee (required for all full-time students)	25.00
Library Fee (required for full and part-time students)	10.00
Student Activities Fee (required of all full-time students)	35.00
Books (estimate for full-time students)	200.00
Dormitory Housing (full-time women students only)	470.00
Off-campus Housing (men and women students)	400.00-900.00

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There are additional expenses for which the student should plan in estimating his total expenses for each year. These include the cost of a regulation uniform for physical education at approximately \$20.00 (purchased in the freshman year or at such other time as the physical education requirement is undertaken), an annual music fee of \$5.00 for music majors, a laboratory breakage fee of \$15.00 for students enrolled in laboratory science and experimental psychology courses, a late registration fee of \$5.00 (paid only when applicable), a dormitory breakage deposit of \$25.00 (paid by dormitory residents upon acceptance of room assignments), and a \$5.00 placement fee (paid by graduating seniors only). Junior and senior nursing students are required to purchase uniforms for clinical nursing experiences. Students who commute to the College should also include an estimate of expenses for noon meals and for daily transportation.

* All expenses are effective for September, 1973, and are subject to change without notice.

+ Part-time tuition fees are applicable only to students admitted to the College under regulations governing part-time programs for students matriculated at other colleges and part-time programs for talented high school seniors.

MEAL PLANS

The College offers the following options for student meals:

	Per Week	Per Semester
1. 3 meals per day, 7 days a week	\$15.00	\$255.00
2. 3 meals per day, 5 days a week (Monday through Friday)	\$13.50	\$229.50
3. Choice of 2 meals (Monday through Friday)	\$12.00	\$204.00

PAYMENT OF FEES

Students will be permitted to attend classes and to use College facilities only after they have cleared their financial obligations or have made satisfactory arrangements for payment. All fees are payable in advance, on or before the day of registration for each semester. The tuition fee is payable in two installments. Residents of the Commonwealth registered for full-time study must pay \$150.00 at the beginning of each semester. Non-resident students must pay \$300.00 per semester.

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The student activities fee of \$35.00 and the athletic fee of \$25.00 are payable in full in September on the day of registration. Dormitory fees are paid in three installments, a \$50.00 deposit paid immediately upon notification of room assignment, \$210.00 on the day of registration in September, and \$235.00 on the day of registration for the second semester. The meal charge is paid semi-annually on the day of registration for each semester. Other required fees of the College are paid in two equal installments on the day of registration for each semester. No student will be permitted to register for classes until he has discharged his indebtedness to the College, including payment of all library fines and liabilities.

Checks or money orders for payment of fees and tuition must be made payable to Lowell State College. Checks for the meal fee must be made payable to the appropriate food service corporation, the name of which may be secured from the Bursar.

TUITION REFUND SCHEDULE

After the 1st week but before the 2nd week	100% refund
After the 2nd week but before the 3rd week	80% refund
After the 3rd week but before the 4th week	60% refund
After the beginning of the 4th week	no refund
All fees of the College are non-refundable	

FINANCIAL AID

Scholarship Programs

COMMONWEALTH SCHOLARSHIPS: The Board of Higher Education awards scholarships to residents of Massachusetts on the basis of academic promise and demonstrated financial need. Applications for the Commonwealth Scholarships should be secured from appropriate high school guidance offices early in the applicant's senior year.

CITY OF LOWELL SCHOLARSHIPS: The City of Lowell supports sixty scholarships to the College, forty of which are reserved for students of nursing. These scholarships, for Lowell residents only, provide payment of tuition costs during the entire undergraduate period when the recipient maintains a satisfactory scholastic record. Applications for these scholarships may be secured from guidance personnel at Lowell High School in April of the applicant's senior year.

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FEDERAL NURSING SCHOLARSHIPS: A nursing student with exceptional financial need may be eligible for a federal nursing scholarship. Specific determination of need is made by the College in accordance with guidelines of the Health Professions Manual. An entering freshman is automatically reviewed for this program if he has filed a Parent's Confidential Statement with the College Scholarship Service, Princeton, New Jersey.

Loan Programs

Loans to students are normally administered through three channels: the College, state guaranteed loan agencies, and private organizations. The College administers such federal programs as the National Direct Student Loan Program, the Federal Nursing Student Loan Program, the Educational Opportunity Grants Program, and the College Work-Study Program. The College also administers two loan funds established by previous classes: the

Student Loan Fund (est. 1899) and the George Anthony Walsh Loan Fund (est. 1953). For all federal loan and work opportunity programs, academic merit and financial need are the two chief criteria considered when applications are reviewed. **High school candidates for such programs must file the Parent's Confidential Statement no later than March 1 of their senior year, and preferably at the time of application for admission to the College.** The Parent's Confidential Statement form may be obtained from the student's high school guidance office or from the Financial Aid Officer, Lowell State College, Lowell, Massachusetts 01854. The completed Parent's Confidential Statement should be sent directly to the College Scholarship Service, Box 176, Princeton, New Jersey 08540. Completed applications are reviewed by the College and students are evaluated to determine their eligibility for all programs of financial assistance.

The following listings summarize the basic purposes and eligibility requirements of the major loan programs available to students of the College.

FEDERAL ASSISTANCE PROGRAMS

National Direct Student Loans: National Direct Student Loans (formerly National Defense Student Loans) are made to needy and worthy students from funds provided under the terms of Title II of the National Defense Education Act of 1958 as revised by Title IV of the Higher Education Act of 1965. To be eligible, students must be American citizens or permanent residents of the United States. They must be attending or planning to attend college and they must carry the normal full-time academic work load as determined by the institution attended. The general terms of the NDSL program are as follows:

1. All students accepted for admission or already enrolled and in good standing are eligible to apply.
2. Loans under this program are granted through the College.
3. Financial need must be considered and loans may not be granted in excess of need. Moderate income families may participate in this program.

Nursing Student Loan Program: The Nursing Student Loan Program assists students who need financial assistance to pursue a course of study in nursing. The goal is to increase the opportunities for youth seeking careers in nursing by providing long-term, low-interest loans. The general terms of this loan program are as follows:

1. A maximum of \$2500 per year may be borrowed. The aggregate amount a student may receive for all years is \$10,000.
2. Loans under this program are granted through the College.

3. Repayment must begin one year after the completion of formal education unless military service, VISTA, or Peace Corps duty intervenes and must be completed within ten years.
4. Simple interest at the rate of 3 % commences one year after the completion of formal education. No interest is charged while the student is in college.
5. If a borrower is employed full-time as a professional nurse in any public or non-profit private agency, institution, or organization (including neighborhood health centers), up to 85 % of the Nursing Student Loan plus interest may be cancelled at the rate of 15 % a year for the first three years and 20 % a year for the next two years. (Previous provisions allowed cancellation up to 50 % at the rate of 10 % a year for such service.)
6. If a borrower enters into an agreement with the Secretary of Health, Education, and Welfare to practice for at least two years in an area of a state determined by the Secretary, and after consultation with the appropriate state health authority verifying a shortage of nurses for such area of a state, up to 85 % of all educational loans for nursing training costs plus interest may be cancelled at the rate of 30 % a year for the first two years and 25 % for the third year. (Previous provisions allowed cancellation up to 100 % at the rate of 15 % a year for service in a public or other non-profit hospital in an area determined by the Secretary to have a substantial shortage of nurses.)
7. For loans made under the previous authority, the previous loan cancellation provisions are preserved.

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Student Obligations Under Federal Loan Programs: When a student is about to graduate or is leaving Lowell State College for any reason, he should arrange with the Office of Financial Aid for a schedule of repayment of obligations incurred under either of the two preceding federal programs. At the same time, he should ascertain what supporting evidence he must supply each year if he teaches, attends graduate school, or enters the Peace Corps, VISTA, or military service. The borrower is responsible for keeping the Office of Financial Aid informed of any changes in his permanent address.

Education Opportunity Grants Program: In conjunction with other forms of financial aid, the Educational Opportunity Grants Program provides assistance to students of exceptional financial need with the view of making possible a college education without an attendant indebtedness which would seriously impair future careers. The general terms of the program are as follows:

1. Applicants for this program must be citizens of the United States or must reside in the United States for other than a temporary purpose and with the intention of becoming citizens.
2. Applicants must be accepted for enrollment as full-time students or they must be students in good standing and in full-time attendance in undergraduate institutions.

3. Applicants must show evidence of creative promise and must be capable of maintaining satisfactory collegiate standing.
4. Applicants must evidence exceptional financial need. Such need is determined by the College on the basis of an applicant's family income, family assets, and family size.
5. Applicants must anticipate receiving other financial aid for at least the amount for which they have applied under the Opportunity Grants Program.

College Work-Study Program: The College Work-Study Program is a federally funded program which is designed to provide financial assistance to academically qualified students from low income families. It is possible for a student to finance his entire college education through a combination of loan programs, the Work-Study Program, and summer employment. Under ordinary circumstances, a student may plan his work program to accommodate his college class commitments. Students may work up to 15 hours weekly while attending classes full time, and during the summer or other vacation periods they may work for as many as 40 hours a week.

To qualify for this program during the freshman year, high school applicants must have been accepted for enrollment as full time students. Other students must be in good standing in their respective classes. A student's general eligibility depends upon his need for employment to defray college expenses, and preference is given to applicants from low-income families.

Special Federal Law Relating To Eligibility For Student Assistance (PL. 90-575--The Higher Education Amendments of 1968, Sec. 504)

If an institution of higher education determines, after affording notice and opportunity for hearing to an individual attending or employed by such institution that such individual has been convicted by any court of record of any crime which involved the use of or assistance to others in the use of force, disruption, or the seizure of property under control of any institution of higher education to prevent officials or students in such institutions from engaging in their duties or pursuing their studies, and that such crime was of a serious nature and contributed to a substantial disruption of the administration of the institution with respect to which such crime was committed, then the institution which such individual attends or is employed by shall deny for a period of two years any further payment to, or for the direct benefit of such individual.

If an institution denies an individual assistance under the authority of P.L. 90-575, Sec. 504, then any institution which such individual subsequently attends shall deny for the remainder of the two-year period any further payment to or for the direct benefit of such individual.

If an institution of higher education determines, after affording notice and opportunity for hearing to an individual attending or employed by such institution that such individual has willfully refused to obey a lawful regulation or order of such institution, and that such refusal was of a serious nature and contributed to a

substantial disruption of the administration of such institution, then such institution shall deny for a period of two years any further payment to or for the direct benefit of such individual.

STATE GUARANTEED LOAN PROGRAMS

Another type of loan available to students of the Commonwealth is the Massachusetts Higher Education Loan Plan. The determination of financial need for this loan program is less rigorous than for loans administered by commercial banks and loan agencies. A student who is a permanent resident of Massachusetts may borrow up to \$1000 a year for undergraduate study. There is no interest charge on such loans while the student is in college, provided parental adjusted income is under \$15,000. Upon leaving college, a student is charged a fee of 3% per year on the unpaid loan balance. Monthly repayment of the loan begins within one year after graduation. Loan applications are available at commercial and mutual savings banks, federal savings and loan associations, credit unions, and cooperative banks in the town of the student's residence. Specific inquiries regarding this program should be addressed to:

**The Massachusetts Higher Educational Assistance Corporation
511 Statler Building
Boston, Massachusetts 02116**

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Private Organization Loan Programs

Such private organizations as church groups, credit unions, labor unions, veterans organizations, and service and trust corporations also administer student loan programs for qualified students. Further information on loans from private organizations is generally available through the high school guidance office.

Commercial loans to parents of students are of two types: commercial bank loans, and those from leading institutions specializing in college loans. Generally, commercial loan plans provide payments either to the college or to parents and guardians of the student, with repayment in equal monthly installments. The length of repayment may vary from one semester through six years.

VETERANS INFORMATION

The Veterans Administration has approved Lowell State College for undergraduate study. A student eligible for veterans' training must take his honorable discharge to the Veterans Administration (Kennedy Memorial Building, Government Center, Boston, Massachusetts) where he will receive a certificate of eligibility to be presented to Lowell State College. Upon receipt of this certificate, the College will notify the Veterans Administration to initiate monthly payments to the student. Veterans who are registered for 12 or more semester hours of study are paid for full-time training; for 9-11 semester hours, three-quarter time training; and for 6-8 semester hours, half-time training. Veterans entering the College in September should be prepared to finance themselves through November, when first checks for benefits are normally issued. Benefit payments are made to veterans on a monthly basis after November.

38 A citizen of Massachusetts who is defined as a "Vietnam Veteran" and whose service is creditable to the Commonwealth may be issued a certificate of tuition exemption if he is enrolled in the College as a full-time student. Certificates must be renewed annually prior to the start of each academic year, are in effect only during such time as the student remains in good standing at the College, are limited to a period of study which may not exceed four years, and are issued during an eight year period from the date of discharge or release from active service. To qualify for a certificate of tuition exemption, a "Vietnam Veteran" must first forward photostated copy of his release or discharge papers to the Office of the State Adjutant General, 100 Cambridge Street, Boston, and secure an affidavit ("Form 10") certifying that he meets the requirements of the General Laws for "service creditable to the Commonwealth." This affidavit ("Form 10") must be presented to the Burser who will append it to a certification of enrollment in the College and forward it to the Commissioner of Education.

A veteran who is entering the College for the first time is required to pay the application and acceptance fees within the periods designated on the application form for admission. The acceptance fee of \$50.00 is refundable upon request after the certificate of tuition exemption has been issued by the Commissioner of Education. The application fee of \$10.00 is not refundable. Tuition exemptions do not cover fees of the College, Student Activities fees, or Athletic fees.

Inquiries directed to the College concerning veteran affairs should be addressed to Mr. Leonard Andrusaitis, Veterans Affairs Officer, Lowell State College, Lowell, Massachusetts 01854.



UNDERGRADUATE ACADEMIC POLICIES

GRADING SYSTEM

The College is organized on the semester basis and credits earned for successful completion of a course are expressed in semester hours. One semester hour means approximately one hour of class work and two hours of preparation per week.

The nature of the student's work in a course is officially recorded in accordance with the following letter symbols "A," "B+," "B," "C+," "C," "D," "P," "F," "W," "S," "U," "WS," and "WU." A grade of "A" indicates that the work done by the student is superior and is of the highest honor's quality. "B+" and "B" indicate that course work has been completed with distinction and is of honor's quality. "C+" and "C" indicate satisfactory work which conforms to the general expectations of the College for baccalaureate study. "D" indicates work which meets the minimum requirements for passing a course but which is below the general expectations of the College for baccalaureate study. "P" indicates passing work for which course credit is granted but without reference to the quality of student accomplishment. "F" designates that a course has been failed, that credit has not been granted, and that a student's academic standing has been adversely affected. "W" is a non-qualitive symbol and signifies that a student has withdrawn from a course without prejudice to his academic record. Regulations governing "W," "WP," and "WF" as published in the *Bulletin of Undergraduate Studies 1971-1973* are in effect through September 10, 1973. Curriculum and Instruction courses in Secondary Education and Apprentice Teaching courses are graded on a "S" (satisfactory) or "U" (unsatisfactory) basis. A grade of "S" in Curriculum and Instruction courses in Secondary Education indicates that the quality of a student's work is "C" or better and merits admission of the student to Apprentice Teaching. A grade of "S" in Apprentice Teaching indicates that a student's teaching performance merits an evaluation of "C" or better and warrants recommendation of the student for certification. Although appropriate credits are granted to students when grades of "P" and "S" have been assigned, these credits are not qualitatively weighted and hence do not affect a student's academic average. A grade of "U" indicates that attempted course credits have not been granted and

is awarded without prejudice to a student's academic standing in the College. The symbols "WS" (withdrawn-satisfactory) and "WU" (withdrawn-unsatisfactory) are recorded when a student withdraws from Curriculum and Apprentice Teaching courses and are assigned without prejudice to the student's academic standing. (See also p. 123.)

The symbol "AU" when recorded on the permanent record card indicates that the student has registered for a course on an audit basis and has maintained a satisfactory attendance record throughout the semester. No credit is granted for courses which have been audited.

The letter symbol "I" (incomplete) is recorded at the request of an instructor for extenuating circumstances and indicates (1) that the work of the student in the course is qualitatively satisfactory but that for legitimate reasons a minor part of his course work remains to be completed; or (2) that the record of the student in the course justifies the expectation that he will obtain a passing grade but he has been unavoidably absent from the final course evaluation. A final grade to eradicate the incomplete status must be filed with the Registrar no later than one month after the date on which the succeeding semester begins or a grade of "F" automatically will be recorded for the course. Responsibility for removal of the incomplete status rests entirely with the student, who must arrange with the instructor for completion of course work.

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ACADEMIC STANDING

Academic standing and eligibility for a degree are determined by the quality of the student's course work. To ascertain the student's academic standing, the College uses a point system, each qualitative grade having an equivalent numerical value. A grade of "A" has a point value of 4.0, a grade of "B+" of 3.5, a grade of "B" of 3.0, a grade of "C+" of 2.5, a grade of "C" of 2.0, a grade of "D" of 1.0, and a grade of "F" of 0. Quality points are computed by multiplying the course credit by the numerical value of the qualitative grade assigned. For instance, a 3 credit course completed with a grade of "C+" would carry 7.5 quality points (3 x 2.5). The grade-point average is obtained by dividing the total number of quality points accumulated by the total number of credits attempted and recorded with those qualitative grades which are cited above.

In accordance with policies of the Board of Trustees of the Massachusetts State Colleges, each student must achieve the following averages for all course work attempted through the end of the cited periods: 1.00 through the end of the first semester of the freshman year (15 sh); 1.50 through the end of the freshman

TABLE OF GRADE-POINT REQUIREMENTS FOR ATTEMPTED HOURS OF COURSE WORK

Hours Attempted *	Required Grade Point+	Hours Attempted *	Required Grade Point+	Hours Attempted *	Required Grade Point+	Hours Attempted *	Required Grade Point+	Hours Attempted *	Required Grade Point+	Hours Attempted *	Required Grade Point+
15	1.00	28	1.44	41	1.58	54	1.69	67	1.80	80	1.91
16	1.04	29	1.47	42	1.59	55	1.70	68	1.81	81	1.91
17	1.07	30	1.50	43	1.60	56	1.71	69	1.82	82	1.92
18	1.10	31	1.50	44	1.61	57	1.72	70	1.83	83	1.93
19	1.14	32	1.51	45	1.62	58	1.73	71	1.83	84	1.94
20	1.17	33	1.52	46	1.62	59	1.74	72	1.84	85	1.95
21	1.20	34	1.53	47	1.63	60	1.75	73	1.85	86	1.96
22	1.24	35	1.54	48	1.64	61	1.75	74	1.86	87	1.97
23	1.27	36	1.54	49	1.65	62	1.76	75	1.87	88	1.98
24	1.30	37	1.55	50	1.66	63	1.77	76	1.87	89	1.99
25	1.34	38	1.56	51	1.66	64	1.78	77	1.88	90	2.00
26	1.37	39	1.57	52	1.67	65	1.79	78	1.89	91ff	2.00
27	1.40	40	1.58	53	1.68	66	1.79	79	1.90		

* Included in "hours attempted" are all course credits which have been granted (including credits awarded through transfer and equivalency procedures, course credits which have been awarded with evaluative letter grades, and credits awarded with non-evaluative grades of "P" and "S") and all course credits which have not been granted because of academic failure. Course credits which have not been granted and which carry the symbol "U" are not included in the computation of "hours attempted."

+ The "required grade-point" average is computed solely on the basis of those courses attempted at Lowell State College (or through the auspices of the College within the policies governing authorized off-campus course work) which have been qualitatively evaluated with the following letter grades: "A," "B+," "B," "C+," "C," "D," "F."

year (30 sh); 1.75 through the end of the sophomore year (60 sh); 2.00 through the end of the junior year (90 sh); 2.00 through the end of the senior year (120 sh) or completion of baccalaureate program. Reviews of student records are made twice each year in accordance with the above criteria and on the basis of interpolations which are cited in the "Table of Grade-Point Requirements for Attempted Hours of Course Work." College policies also require each student to achieve a minimum average of 2.20 in his major by the end of the senior year. A student who fails to achieve required averages is dismissed from the College for inadequate scholarship. A student who fails to achieve a 2.00 average in his major by the end of his junior year (typically for 27 attempted hours in the major) has not made satisfactory degree progress and may be dismissed from the College upon the recommendation of his major department and the concurrence of the Academic Standards Committee. Transfer students are evaluated for purposes of required averages solely on the basis of course work which has been attempted at Lowell State College or through its auspices.

GRADE CHANGES

At the end of each semester, the Registrar's Office notifies each student by mail of the course grades he has been assigned. These grades become a part of the official record of the student immediately upon instructor assignment and are not subject to change except upon official authorization by the Academic Dean. Students who believe that mistakes have been made in assigning or recording course grades should notify the Registrar and concerned instructors as soon as possible after receiving their grade reports but in no case at a time later than one week after the beginning of the following semester. The deadline for instructors to correct erroneous grade reports is one calendar month from the beginning of the semester following the filing of an erroneous grade. An instructor who makes an error in assigning a final grade for previously uncompleted course work must file a correction no later than one month from the date on which he filed the erroneous grade. It is the responsibility of the student to notify the Registrar and the concerned instructor of such an erroneous grade as soon as he has received his final grade report from the Office of the Registrar. Under no circumstances may a grade change be made on a student's permanent record card after the deadlines cited above.

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REPEATED COURSE WORK

When a student receives a failure in a required course, he must repeat and pass it. A required make-up course must be approved by the chairman of the department in which the course was failed and must be taken in an accredited

summer session or, when possible, during the regular academic year. Courses in which “F” grades have been received must be repeated and passed before students may take courses for which those failed are prerequisites. A course which is failed but is not required for a student’s program need not be repeated, but other course work must be undertaken when a student’s total degree program will fall short of the required credit hours for graduation. Since cumulative grade point averages reflect all courses taken by a student, both the original failing grade and the repeated course grade are counted in computing such averages. When a repeated course is failed a second time, however, the second failure is not computed if prescribed registration procedures have been followed. When a student registers for a course which he has previously failed or for a course which he wishes to take in lieu of a course he has previously failed, he must notify the Registrar accordingly. Such notification must be made at the time of registration (when the make-up course is undertaken during the fall or spring semesters) or at the time of filing for authorized off-campus course work (when the make-up course is undertaken during the summer). Students who have not followed this registration procedure and fail a course for a second time will have both failures computed into their averages.

COURSE LOAD POLICIES

Students who are matriculating for baccalaureate degrees of the College are required to register for a minimum of 12 hours of course work each semester and may not drop below the minimum course load except for extenuating circumstances and only with the approval of the Academic Dean. Ordinarily, part-time course loads are permitted only for students entering the College under policies governing programs for talented high school seniors and matriculants for degrees at other baccalaureate institutions.

The typical course load expectation for full-time students is 15 hours, but recommended courses of study for full-time students may specify as many as 18 hours for a maximum of three semesters of the four-year baccalaureate program. Curricula may not require students to carry course loads in excess of 18 hours, but with the approval of faculty advisors, students may enroll for course loads in excess of the hours specified by recommended courses of study. Students are warned, however, that course loads in excess of the number of hours specified by recommended courses of study may not be in their academic interests when their grade-point averages are less than 3.00. Unless specified as part of a recommended course of study, course loads in excess of 15 hours are recommended for “enrichment” purposes only.

Students pursuing teacher-education programs and students on probationary status are not permitted to register for less than full-time studies. Scholarship, work-study, and loan programs which are administered by the College are limited to full-time, matriculating students. Students participating in such programs are required to complete a minimum of 12 hours of course work each semester in accordance with the grade-point expectations established for class levels and major studies. Students who fail to maintain required grade-point averages or who complete less than the minimum number of hours required for full-time studies forfeit their rights to participation in all such programs.

“PASS” COURSES (CREDIT-NO RECORD OPTION)

Students may register for one unrestricted elective course on a “pass” basis during each of the sophomore, the junior, and the senior years. Course work which is taken to satisfy the requirements for major and minor areas of study, course work of teacher-education programs, and course work which is within the jurisdiction of the Uniform College Requirements for General Education may not be taken on a “pass” basis. A student who has registered for a course on a “pass” (credit-no record) basis may not change his enrollment status after the established date for adding a course (Cf. College Calendar). A grade of “P” indicates that the student has received credit for the course and that he has satisfied the prerequisite conditions of those courses which specify the elected course as a requirement. Although grades of “P” for courses elected on the credit-no record option are recorded on the student’s permanent record card, these course grades are not computed in cumulative averages. A course evaluation of “F” for a course elected on the credit-no record option is not entered on the student’s permanent record card and accordingly does not affect his cumulative average.

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COURSE AUDIT POLICY

An undergraduate student may audit courses provided that he obtains the permission of concerned instructors and enrolls his name in the roster of course auditors which is maintained by the Office of the Registrar. No charge is levied for full-time students for audited courses. A student may not change his auditor status to credit status after the established deadline for adding a course, and he may not change his credit status to auditor status after the established date for withdrawing from a course. (See College Calendar.) Students who have enrolled their names on the roster of course auditors and who have evidenced satisfactory attendance in audited courses may have such courses listed on their official record cards. Such listing is made at the request of the instructor

at the end of the semester when course grades are filed with the Registrar. Audited courses are characterized by the symbol "AU." Courses of a professional nature ordinarily may not be audited.

INSTRUCTOR COURSE REQUIREMENTS

Prior to the end of the first full week of classes of a semester each instructor is required to announce his course expectations to each of his students. Such an announcement must be in writing and must include a statement of course attendance requirements and specification of the number and types of course evaluations to be employed throughout the semester. One copy of this announcement is deposited with the instructor's department chairman for information purposes.

A minimum of three evaluations of student progress (written or oral examination, written report, or jury or performance evaluation) must be made in each course, at least one evaluation being required during each of the first and second eight week periods. Upon the request of a student, an instructor is required to provide a statement of the student's course progress. Students who are in danger of receiving course grades of "D" and "F" must be notified prior to the established date for withdrawing from courses. (See College Calendar).

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EXAMINATION REGULATIONS

Final course examinations are generally expected for undergraduate courses of the College, but an instructor may substitute other types of evaluation for the formal course examination when, in his judgment, such substitution appears to be necessary or desirable and has been specified by his statement of course expectations. Final examinations are from one and a half to three hours long, according to the requirements of instructors.

Unless the instructor has made special arrangements with the Registrar, final examinations must be given at the time and place specified by the official examination schedule. Multi-section examinations may be scheduled by the Registrar at the time designated by the official examination schedule, such scheduling being arranged upon the petition of instructors and provided on a "first come-first serve" basis. Additional arrangements may be made with the Registrar for multi-section course examinations beyond those which are specifically provided by the official examination schedule, but instructors are

advised that such arrangements are subject to the availability of rooms and to the priority of those course examinations which are specified by the official examination schedule. Instructors who cannot arrange such accommodations with the Registrar may not give multi-section course examinations.

With the exception of practical examinations for laboratory courses or sections, final course evaluations (including written and oral examinations, “take-home” examinations, and music juries) may not be scheduled during the last week of classes. “Take-home” examinations may be submitted to instructors during the examination period only. It is the responsibility of the instructor to notify each student in writing concerning the time and place for submitting such examinations.

Upon the recommendation of the chairmen of concerned departments, exceptions to the above regulations may be granted by the Academic Dean. Such exceptions will be granted only for circumstances which are clearly of an extraordinary or emergency nature.

Only in a relatively few cases is it possible for a student to pick semester courses whose examination schedules are in conflict. Under no circumstances, however, may a student register for such courses.

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ATTENDANCE REGULATIONS

Regularity in class attendance and performance is necessary for collegiate success, and all students are expected to comply with class commitments. Although the College imposes no general attendance regulations, each instructor at the beginning of a course will announce his attendance requirements. An instructor may require official administrative or medical excuses for unattended classes, and at his discretion he may fail a student who has exceeded the number of unexcused class hours delimited by the course credit.

RESIDENCY REQUIREMENT

In order to qualify for a baccalaureate degree of Lowell State College, all students must complete a minimum of one year of full-time study at the College (not less than 15 hours per semester) and ordinarily must be in residence for both semesters of their senior year. Students who have entered the College as freshmen and who have completed three years of full-time study at the College may be permitted to complete their senior year at another accredited

baccalaureate institution under the regulations governing authorized off-campus course work. Students transferring to the College at the beginning of the senior year must complete at least 9 semester hours of regular classroom course work within their major academic departments, except that senior transfer students in teacher-education programs are also required to complete the total professional program specified for the senior year. Medical Technology students are required to satisfy the residency requirement of the College during the junior year and to complete the prescribed senior internship through the auspices of the College. In fulfilling the basic residency requirement, Nursing students are required to complete the clinical program which is specified for the senior year.

COURSE EQUIVALENCY PROCEDURES

Unusually qualified degree candidates are given the opportunity to receive credit for specific college courses (without having to fulfill the classroom or outside requirements) through two means: (1) departmental equivalency examinations and (2) tests of the College Level Examination Program (CLEP). Equivalency examinations are not permitted for courses in progress, for courses which have been failed, or (ordinarily) for courses whose primary objectives are performance oriented. Students who are interested in taking equivalency examinations for courses to be offered during the fall semester are required to file applications for such examinations with the Registrar during the fall preregistration period which is scheduled for the previous spring semester. Examination applications for courses to be offered during the spring semester must be filed with the Registrar during the spring preregistration period which is scheduled for the previous fall semester. Applications must be presented on the appropriate form provided by the Office of the Registrar, must specify the course in which equivalency credit is sought, and must bear the endorsements of appropriate officers and faculty of the College. No student is authorized to take an equivalency examination until he has filed his approved application with the Registrar. Authorizations to take examinations are in effect only during the period between preregistration and registration and automatically expire on the first day of registration.

Students who desire to take the subject examinations of CLEP should consult the approved listing of such examinations which is printed below and arrange to take authorized examinations at Boston University or other approved testing center of the Educational Testing Service, Princeton, New Jersey. Interested students are advised to call or write to Mrs. Eleanor Counselman, Testing Coordinator, Boston University Counseling Center, 704 Commonwealth Avenue,

Boston, Massachusetts 02205 (tel. 353-3545). Subject examinations of CLEP are administered every Thursday at Boston University. The fee for each CLEP examination is \$15.00. Course credit through the subject examinations of CLEP will be granted by appropriate departments when students have achieved scores which are on or above those specified test requirements which are cited in the following table of subject examinations and course equivalents.

CLEP EXAMINATIONS	CREDIT ALLOWED	SCORE REQUIRED	COURSE EQUIVALENTS
American Government	3	47	PO 111-- Introduction to American Politics
American History	6	46	HI 111-112--U.S. History
American Literature	6	46	EN 241-242--History of American Literature
Analysis and Interpretation of Literature	3	49	EN 132--Types of Literature
Biology -- Analysis	6	49	BI 101-102--Life Sciences
College Algebra	3	50	MA 103--College Algebra
Computers and Data Processing	3	46	MA 109-- Introduction to Theory of Computer Programming
Educational Psychology	3	47	FE 322--Educational Psychology
Elementary Computer Programming	3	48	MA 209--Elementary Computer Programming
English Composition	3	48	EN 101--English Composition
English Literature	6	46	EN 231-232--History of English Literature
General Chemistry	4	48	CH 111--General Chemistry
General Psychology	3	47	PS 101--General Psychology
Geology	6	49	GL 201-202--General Geology
History of American Education	3	46	FE 305--History of American Education
Human Growth and Development	3	47	PS 163-- Developmental Psychology
Introductory Calculus	3	48	MA 107--Introduction to Calculus
Introductory Economics	6	48	EC 101-102--Principles of Economics
Introductory Sociology	3	46	SO 101--Introduction to Sociological Analysis
Statistics	3	49	MA 206--Elementary Statistical Analysis
Tests and Measurement	3	46	FE 311--Measurement and Evaluation
Trigonometry	3	49	MA 105--College Trigonometry
Western Civilization	6	50	HI 101--Classical Civilization and HI 105-- European History to 1715

Departments are not obligated to administer equivalency examinations when there is a corresponding CLEP test. Students may not repeat departmental equivalency examinations and may not reapply for such examinations in courses which have been previously attempted through such examinations. Students must make individual arrangements with course instructors to take

departmental equivalency examinations but may not be permitted to take such examinations until instructors have received approved student applications from the Registrar. After the student has completed an authorized examination, the instructor must file an assigned grade with the Registrar prior to the first day of the registration period. All departmental equivalency examinations are administered in accordance with departmental policies and at a time and place determined by concerned departments. Course credit through departmental examinations will be granted by appropriate departments only when such examinations have been passed with grades of "C" or better. No fee is presently levied for administration of departmental equivalency examinations.

50 Courses which have been satisfied through course equivalency procedures are noted on the student's permanent record card. No grades for equivalency examinations are recorded on the permanent record card and such examination credit as may be granted is not computed for determining grade-point averages. The number of credits which a student may earn through departmental equivalency examinations and the general and subject examinations of the College Level Examination Program is 90 semester hours. Students who have transferred to the College may not apply for equivalency credit in excess of a number which is determined by subtracting all course equivalency and transfer credits accepted by the College at the time of admission from the maximum of 90 hours permitted for both transfer and equivalency credit. Nor may they present equivalency credits in fulfillment of the senior residency requirement or in fulfillment of the basic requirement for major studies which specifies a minimum of 9 semester hours in regular classroom instruction offered by the student's major department(s). For further information consult the regulations concerning "Course Credit Limits through Equivalency and Transfer Policies" which appear elsewhere in this Bulletin under the heading **Undergraduate Admission Policies**.

AUTHORIZED OFF-CAMPUS STUDY

Authorized off-campus course work may be undertaken through the auspices of the College in accordance with the following procedures: (1) cross-registration at Lowell Technological Institute, (2) summer-school study at accredited associate or baccalaureate institutions, and (3) full-time study at accredited baccalaureate colleges and universities. Permission to undertake course work within these provisions requires official notification of the Office of the Registrar by the filing of specified forms for off-campus study. Students who fail to follow the procedures described below and/ or to file the proper forms with the Office of the Registrar may not have completed off-campus course work credited to programs at Lowell State College.

Course work which is undertaken within the provisions for authorized off-campus study is treated as course work completed at Lowell State College. Upon receipt of an official transcript of record, notation of authorized course work (including course work which has been failed) will be entered upon the student's permanent record card and assigned grades will be computed into major and baccalaureate grade-point averages.

Medical Technology students who have transferred to the College at the beginning of their junior year and other students who have transferred to the College with 90 or more semester hours are required to complete two semesters of full-time study at the College and accordingly are not permitted to undertake off-campus course work. Students who have transferred to the College with no more than 60 semester hours are permitted to pursue off-campus course work within the provisions governing cross-registration at Lowell Technological Institute and authorized summer-school study. Students may be permitted to complete their senior year through full-time, off-campus study only if they have completed three years of full-time study at Lowell State College.

Cross-Registration at Lowell Technological Institute

Full-time students may cross-register for course work at Lowell Technological Institute providing that their faculty advisors and department chairmen have approved their selection of courses and that course enrollments at the Institute permit. Cross-registration at the Institute is permitted during any semester only when comparable courses at Lowell State College have been over-subscribed or cancelled. Subject to the approval of faculty advisors and department chairmen, those undersubscribed courses of the Institute which are not offered by the College are open to all students who can satisfy course prerequisites as specified in the official catalogue of the Institute. Students wishing to cross-register for course work at Lowell Technological Institute must file a completed "LSC-LTI Cross Registration" form with the Office of the Registrar during the preregistration period and must comply with registration procedures as specified by the Office of the Registrar of Lowell Technological Institute. Students undertaking course work at the Institute through cross-registration procedures are required to comply with the schedule of class meetings and examinations as specified by the official calendar of the Institute.

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Summer School Study

A student who wishes to make up a failed course or to complete course work for any of the several baccalaureate requirements of the College through

summer-school study at accredited associate or other baccalaureate institutions (including approved "summer study abroad" programs) may apply for permission to undertake such studies by filing the form for "Authorized Summer-School Study" with the Office of the Registrar. Students are permitted to enroll in Massachusetts Community Colleges and other accredited associate institutions only if course work is to be presented in lieu of course offerings of Lowell State College which are on the "100" and "200" levels. Students with junior and senior class standing are not permitted to undertake course work at associate institutions except to satisfy uncompleted freshman or sophomore requirements. The form for "Authorized Summer-School Study" must be filed prior to the spring semester deadline (cf. College Calendar), must specify the summer courses to be undertaken (together with the prefix number, and title of courses as listed in the current **BULLETIN OF UNDERGRADUATE STUDIES** for those courses which are required by the student's program), and must bear the endorsement of the following individuals: (1) instructors responsible for teaching equivalent courses at Lowell State College, (2), the student's faculty advisor, and (3) the chairman of the department in which the summer-school course equivalent is offered at Lowell State College. It is the responsibility of the student to secure a copy of the current summer-school catalogue for the inspection of concerned College authorities and to make arrangements with the institution for submitting an official course transcript to the Registrar. Under no circumstances will the Office of the Registrar accept a student's grade report in lieu of an official transcript of record. Students may not make changes in their authorized program of off-campus studies without the explicit permission of individuals authorizing such studies or, in their absence from the College during the summer months, of the Academic Dean.

Full-Time-Off-Campus Study

Students who have entered the College as freshmen and who have completed 60 semester hours at the College with cumulative averages of 2.00 or higher may satisfy specific degree requirements at other accredited baccalaureate institutions (including approved "foreign study abroad" programs) through one or two semesters of full-time study during their junior and or senior years. Such study will be authorized only for specific periods and for specific course objectives and may not be undertaken for more than two semesters. Permission to undertake such study is granted by the Academic Dean upon the recommendation of a student's program director or the chairman of his major department. Students who contemplate full-time, off-campus course work must secure copies of the current catalogues of the institutions which they wish to

attend for the inspection of their program directors or the chairmen of their major departments who will recommend programs of study for the approval of the Academic Dean. It is the responsibility of the student for making arrangements with other colleges and universities for admission and for forwarding to the Registrar of Lowell State College an official transcript of record of all courses attempted during the period of off-campus study. The form for "Full-Time, Off-Campus Study" must be filed with the Office of the Registrar prior to the official end of the semester preceding off-campus study, must specify all courses to be undertaken (together with the prefix, number and title of courses as listed in the current **BULLETIN OF UNDERGRADUATE STUDIES** for those courses which are required by the student's program), and must bear the endorsements of appropriate program directors or department chairmen and the Academic Dean. Students may not make changes in their authorized programs without the explicit permission of individuals who have authorized their off-campus studies.

CLASS RANKING SYSTEM

Irrespective of the provisions of recommended courses of study and the number of full-time semesters completed by students, the Office of the Registrar determines class standing on the basis of total credit hours completed and recorded as follows:

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Classification	Earned Hours
Freshman	0-29
Sophomore	30-59
Junior	60-89
Senior	90-Graduation

COURSE WITHDRAWAL

A student may drop and / or add a course without penalty within the first two full-weeks of the beginning of a semester but may not add a course after the end of the second full-week. Students who drop a course during the period from the beginning of the third week to the end of the tenth week of a semester will receive grades of "W". Students withdrawing from courses after the tenth week of a semester receive grades of "WP" or "WF". No student may withdraw from a course after the last day of scheduled classes for any reason other than a documented emergency. Any student who fails to notify the Registrar by filing the proper form that he has withdrawn from a course and who is consequently

carried throughout a semester on the official course list will receive an administrative grade of "F".

WITHDRAWAL FROM THE COLLEGE

Students desiring to withdraw from the College are required to discharge all financial obligations to the College, to return all College property, and, if possible, to have a conference with the Academic Dean, the Dean of Men, the Dean of Women, or the Director of Student Counseling. All withdrawing students must file a written notification of withdrawal with the Registrar. When withdrawal occurs prior to the end of a semester, failure to comply with the provisions of this regulation will necessitate failure of all courses for which the student is enrolled at the time of his unauthorized withdrawal. A student who withdraws with permission of the College prior to the date established for withdrawing from courses receives a grade of "W" in each of his courses. Authorization to withdraw from the College after the last day of scheduled classes will be granted only in cases of documented emergency. A student who withdraws from all his courses must withdraw from the College. (For regulations concerning readmission to the College, consult the following statements below: "Standard Readmission Procedures" and "Probationary Readmission Procedures.")

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STANDARD READMISSION PROCEDURES

All requests for readmission must be directed to the Office of Admissions. Individuals who were students in satisfactory academic standing prior to their withdrawal are automatically readmitted to the College. Such students are warned, however, that limitations of special facilities and established annual quotas for professional curricula may delay or prohibit resumption of previous studies. Students who have been absent from the College for two or more continuous semesters are subject to the rules and regulations of the College which are in effect at the time of their readmission rather than at the time of their original admission. Readmission to the College does not guarantee acceptance to teacher-education programs, for which there are established qualitative requirements.

Students are not automatically reinstated when they have been absent from the College for periods exceeding seven years. Course work which has been completed at the College prior to seven years of the date of readmission is

generally recognized only through those examination procedures described in the policy statements for course equivalency. Such course work may also be evaluated on an individual basis by the Academic Standards Committee. Students who wish to have such course work evaluated by the Committee prior to readmission must present their cases in writing to the Committee no later than the last Friday of December for spring semester readmission and no later than the last Friday of June for fall semester readmission.

Non-matriculating students are admitted for specific periods and for specific course objectives. Such students who wish to return to the College are evaluated by the Office of Admissions on their individual records and in accordance with their current and previously cited objectives. Such readmission is permitted only when facilities of the College are not fully committed to matriculating students.

PROBATIONARY READMISSION PROCEDURES

Students who have been dismissed from the College for inadequate scholarship may petition the Academic Standards Committee for readmission as “probationary” students subject to the following regulations. Each student seeking readmission as a probationary student must submit to the Academic Standards Committee a formal letter of petition which evidences strong justification for his readmission to the College. Such petition must be submitted no later than the last Friday of December for spring semester readmission and no later than the last Friday of June for fall semester readmission. If such a petition is granted, an appropriate semester program of full-time studies (not less than twelve semester hours) will be specified by the Academic Dean in conformity with such recommendations as may be made by the Committee and concerned academic departments.

A minimum grade of “C” must be maintained in each course of the prescribed semester program of studies which is undertaken by a student on probationary status. Failure to achieve this required standard of the probationary requirement does not permit students to register for courses on a “pass-no record” basis, to undertake course work which has not been specifically prescribed by the Academic Dean, to withdraw from courses, or to withdraw from the College. Consequently, no student should contemplate undertaking probationary course work unless he can fully commit himself to his prescribed course of study. A student who is unable to complete his probationary semester for documented reasons of health or for other certified emergency conditions may petition the Committee for a limited postponement of the probationary semester.

Students on probation who receive course evaluations of “I” (incomplete) must complete with grades of “C” or better all incomplete course work prior to their reinstatement as matriculating students. Accordingly, students who fail to complete such courses prior to the beginning of the following semester may not register for course work until such time as the Committee has ascertained that all conditions for the removal of probationary status have been satisfied. A final grade to eradicate the incomplete status must be filed by the student’s instructor no later than one month after the date on which the succeeding semester begins or a grade of “F” automatically will be recorded for the course. Responsibility for removal of the incomplete status rests entirely with the student, who must arrange with the instructor for completion of all course work.

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Removal of probationary status is granted after successful completion of the probationary semester, at which time the student is subject to the rules and regulations governing the grade-point averages established for class levels and major studies. Students who fail to achieve the required grade-point averages at the end of the semester following the probationary period are permanently dismissed from the College. During the semester of probationary standing, the student will be advised by the Academic Dean or by the Assistant Dean of Women. After successful completion of the probationary semester, the student will be assigned a faculty advisor from an appropriate department of the College. A student who has been granted readmission as a probationary student may not again petition the Academic Standards Committee for readmission. All decisions rendered by the Academic Standards Committee are final.

SENIOR PROGRAMS OF STUDY AND APPLICATIONS FOR GRADUATION

Each senior student is required to file an official program of studies during the first ten calendar weeks of the fall semester of his senior year. Two copies of the program are to be filed with the Academic Dean for final approval before the end of the semester, such approval requiring the endorsement of appropriate department chairmen of major concentrations and specializations and of appropriate directors of teacher-education programs. Students may make changes in their programs by filing an approved “Change in Program of Study” form with the Academic Dean. One copy of each approved program of studies and change in program of studies is forwarded to the student’s department chairman. The second copy is forwarded to the Registrar.

Upon receipt of program approval by the Academic Dean, department chairmen will notify each qualified senior to file his application for graduation. Seniors who are candidates for June degrees must file applications for

graduation in accordance with established deadlines. (See College Calendar) Students who anticipate completing degree requirements during the summer or at mid-year should take special note of this requirement. Students who fail to complete degree requirements as anticipated are required to re-file the application for graduation prior to the next spring deadline.

It is the responsibility of the student to fulfill all degree requirements and to secure the approval of the various collegiate authorities in filing official programs of study, changes in programs of study, and applications for graduation prior to the established deadlines for filing such documents. Students may secure all required forms to which this regulation refers from the Office of the Registrar.

COLLEGE HONORS

The College publishes each semester a list of students who have achieved honorable semester records and awards degrees with three levels of distinction at commencement upon those seniors who have exhibited exceptional scholastic abilities throughout their four years of undergraduate study. The Dean's List recognizes students who have achieved semester averages of 3.00 or higher for a minimum of 12 semester hours of work. Graduation "Summa Cum Laude" recognizes cumulative four year averages of 3.80 or higher, "Magna Cum Laude" a cumulative average of 3.40 to 3.79 inclusive, and "Cum Laude" a cumulative average of 3.00 to 3.39 inclusive. The Gold Key is conferred at commencement to those students who graduate "Summa Cum Laude." The Student Government Association annually awards the Silver Key to as many as four seniors on the basis of outstanding qualities of character, leadership, and loyalty to the College.



UNDERGRADUATE STUDENT REGULATIONS

STUDENT BEHAVIOR

Although the officers and faculty of Lowell State College fully subscribe to the view that students have the right of self-determination over their private lives and public conduct and accordingly eschew regulating the extra-campus behavior of students, they expect that every student upon enrolling in the College will automatically accept the obligation to comply with College rules and regulations. The expectation is that each student will put forth a genuine effort academically and will disavow such academic offenses as cheating, plagiarism, misuse of equipment, damage to college property, and interference with the rights of administrative officers, faculty members, and other students to use collegiate facilities.

Non-Academic Offenses

Students who violate parking regulations, who damage college property, and who interfere with the rights of administrative officers, faculty members, and other students to use collegiate facilities will be prosecuted in accordance with the laws of the Commonwealth and the regulations of Public Law 90-575, Sec. 504 governing federal assistance programs. Charges to replace or repair property of the College which has been stolen or damaged will be levied against offending students. Students who fail to pay such charges prior to the end of the semester in which they have been levied will be denied permission to register for course work or to attend classes, and a bill for damages will be conveyed to the Office of the Attorney General for collection.

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Academic Offenses

Students who violate rules and regulations concerning academic dishonesty may be suspended or expelled from the College if the President of the College or members of the Committee for Academic Offenses determine that such action is in the academic interests of the College.

Academic offenses are defined as cheating and plagiarism. The following definitions of these terms are officially recognized by the College.

DEFINITIONS OF ACADEMIC OFFENSES

Cheating is defined as (1) misrepresenting academic work which has been done by another as one's own efforts - - whether such misrepresentation has been accomplished with or without the permission of the other individual, (2) utilization of prohibited assistance (whether in the nature of a person or a resource) in the performance of assignments and examinations, and (3) copying of another student's work or the giving or receiving of information or answers (whether verbally or in writing) during an examination.

Plagiarism is defined as (1) direct quotation or word for word copying of all or part of the work of another without identification or acknowledgement of the quoted work, (2) extensive use of unacknowledged quotation from the work of others which is joined together by a few words or lines of one's own text, (3) an abbreviated restatement of someone else's analysis or conclusion, however skillfully paraphrased, without acknowledgement that another person's text has been the basis for the recapitulation, and (4) the use of an apt term or phrase which is taken from another's text and is inserted into one's own work without acknowledgement of the source.

COLLEGE PROCEDURES GOVERNING CHARGES OF ACADEMIC DISHONESTY

1. Allegations of academic dishonesty can be brought against a student only by the instructor concerned, except that in a case of alleged plagiarism the complaint of an instructor must be accompanied by the concurrence of two additional instructors from the same academic department.
2. A student against whom a charge of academic dishonesty has been brought and who rejects this allegation after an attempt to resolve the dispute with the instructor may lodge a complaint with an "ad hoc" Committee for Academic Offenses.
3. All allegations of academic dishonesty are to be referred directly to the Chairman of the Academic Standards Committee and on receipt of such allegations, he shall authorize an "ad hoc" Committee for Academic Offenses to conduct a hearing on the alleged misconduct.
 - a. The "ad hoc" Committee for Academic Offenses shall consist of five members, including three members of the Faculty appointed by the Chairman of the Academic Standards Committee (of whom no more than two may be members of the Academic Standards Committee) and two student senators appointed by vote of student members of the College Senate. No faculty member may sit on the "ad hoc" Committee who is a member of the academic department in which the allegation of academic dishonesty has originated.
 - b. The "ad hoc" Committee for Academic Offenses shall notify in writing the accused student or the faculty member against whom complaint is being made of the specific nature of the charges against him and shall further

notify in writing the accused student and the instructor bringing the complaint of the time and place at which the hearing will take place.

4. Both parties may introduce at the hearing such evidence and testimony as they believe to be relevant to the case at hand. In all cases, the Committee shall determine both the admissibility and relevance of such evidence or testimony.
5. A student charged with or protesting allegations of academic dishonesty has the right to be represented at the hearing by an attorney or faculty advisor of his choice. The accused student shall have the right to hear testimony from adverse witnesses and to question them. The Committee shall not consider statements and testimony which are adverse to the student unless they are made in his presence and unless he has been given an opportunity to rebut them.
6. In the event that the Committee judges the allegations of academic dishonesty to be substantiated beyond a reasonable doubt, the Committee shall prescribe an appropriate penalty which reflects the Committee's evaluation of the seriousness of the offense. Such penalties shall range from reprimand to expulsion and shall include a determination of the student's grade for the course in which the offense took place.
7. The Committee shall keep a careful transcript or tape recording of its proceedings and shall supply a written summary of its findings and sentence. These records shall be made available to the President of the College in the event of an appeal by the accused from a decision of the Committee. In the event that an accused student is exonerated by the Committee of the charges brought against him, all records of proceedings shall be destroyed at the close of the hearing.
8. A student who has been exonerated of charges shall not be subject to any penalties which an instructor may have invoked prior to the Committee hearing, and the Committee shall mandate a recomputation of any grade previously rendered which may reflect such penalties. Regulations concerning deadlines for filing changes of grade shall not apply to the Committee.
9. A student charged with academic offenses may appeal a decision of the Committee to the President of the College. The decision of the President, following his review of the charges specified and of the evidence and testimony given to the Committee, is final.

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REQUIRED IDENTIFICATION CARDS

All students of the College must secure official identification cards within one week of their first attendance at the College. Members of the college community are expected to present their identification cards when attending college functions or when requested to do so by officers and faculty of the College. Students are required to surrender their college identification cards when they sever their official connections with the College.

REQUIRED NOTIFICATIONS OF CHANGES IN STATUS

All changes in student records (including changes of academic programs, course registrations, official name, address, and telephone number) must be made through the Office of the Registrar. Notification of other offices of the College does not constitute official notification unless also made with the Registrar.

PARKING REGULATIONS

All students owning or driving automobiles are required to register their vehicles with the College at the time of registration, or at the time thereafter when vehicles are first driven to the College, and to place parking stickers on the rear windows of their automobiles. Students who do not display parking stickers and who park on College property are subject to municipal court fines.

Parking is restricted to areas behind the Humanities Building, the student lot at the corner of Wilder and Broadway Streets, and to the student lot adjacent to the Maintenance Facility. Parking on city streets is permitted only on Broadway and Wilder Streets in accordance with posted regulations. Student parking is not permitted in college driveways or in faculty parking areas.

LIBRARY REGULATIONS

The Library houses a collection of 90,000 volumes, 700 periodicals, 9,000 phonograph records, 80,000 microforms, and limited special collections. The Curriculum Materials Center is also located in the Library. This educational resources center contains textbooks for both the elementary and secondary levels, literature for children and adolescents, a test collection, curriculum guides, and other materials of value to students preparing to teach. Medical reference and periodical collections are augmented by the holdings of affiliated hospital libraries which may be used by Nursing and Medical Technology students and, upon request, by other students of the College.

The services of the Library include the loan of books, pamphlets, filmstrips, and recordings to registered borrowers. The library staff provides library-orientation periods for classes to point out the important bibliographic tools necessary for basic research.

General Regulations. The following regulations are presently in effect for all students of the College:

New students should apply for a library card at the beginning of the school year. This card must be presented upon request for identification purposes and must be presented to the circulation librarian whenever a student wishes to take materials from the Library. The library card is valid until graduation, termination of a student's enrollment, or until revoked by the Librarian, and is not transferable. The owner of a library card is responsible for all material charged to his card until such time as he has informed library authorities that his card has been lost or stolen.

Students are not permitted to bring food to library areas or to socialize, talk, or generally engage in activities contrary to that atmosphere which is expected for research and study in a library setting. A student's library privileges, including the right to study in library areas, may be revoked by the Librarian when a student fails to abide by library rules for appropriate conduct. Such revocation of library privileges is entirely within the province of the Librarian.

Students who retain regular circulating materials for three weeks or more beyond their authorized period of circulation, who retain reserve materials for two weeks or more beyond their authorized period of circulation, or who retain books and phonograph records after the beginning of the final examination period without explicit permission from the Librarian shall forfeit their library privileges.

Any student who steals or maliciously defaces library property shall forfeit his library privileges indefinitely.

Reinstatement of library privileges may be granted only by the Librarian.

Any student who has incurred library fines, lost library materials, or damaged library property must discharge his financial obligations to the Library before the end of the semester in which such obligations have been incurred or he may not register for course work for the following semester. Seniors who have not discharged their financial indebtedness to the Library by the end of May will not be permitted to graduate until such time as they have discharged their indebtedness and their records have been cleared by the Business Office.

Library Fees. Library fees are levied according to the following schedule.

1. Overdue Books and Phonograph Records:

- a. Regular Circulating Books and Phonograph Records--10c a day per book or record;
- b. Reserve material--25c per ½ hour to a maximum of \$2.00 per book or record for the first day, and \$1.00 per book or record for each succeeding class day per overdue item.

- c. Recalled material--\$1.00 a day per book or record to maximum of \$10.00 per book or record.

2. Lost Library Materials:

- a. Replacement cost of lost material plus
 - b. Processing fee of \$5.00 per lost item.
3. A student who has lost library materials and fails to notify library authorities of his loss within two weeks of the mailing of official notification of delinquency must pay accumulated fines up to \$10.00 per book or record plus the replacement and processing fees levied for each lost item.

Circulation Regulations. Books may be borrowed for a period of two weeks and may be renewed for an additional two weeks unless they have been requested by other students or by faculty members. No more than five books may be charged at one time to a student. Copies of reserve books are to be used for a period of two hours, at which time they may be recharged for an additional two hours if other students have not requested them. Reserve books of which the Library has more than one copy may circulate after 1 p.m. and are due at 9 a.m. the following class day or (at the discretion of the Librarian for best accessibility) at some other designated time.

Periodicals may not be taken from the Library. Students desiring to make extensive use of periodical articles are advised to make copies of the relevant portions of such articles on the self-operated photocopy machine located adjacent to the card catalogue.

Students desiring to use periodicals, filmstrips, or microfilms within the Library must secure these materials through the circulation desk. Curriculum materials which are not on reserve circulate for a period of one week only.

PE phonograph records circulate for a one-week period and are not renewable. PH and PL phonograph records circulate for over-night use only.





UNDERGRADUATE STUDENT SERVICES

COLLEGE HEALTH AND COUNSELING SERVICES

The College has limited facilities for professional student counseling, but for referral purposes it has access to the Lowell Mental Health Service. A physician is on contract to the College and is available for student physical examinations and for emergency situations. Student problems of a non-medical and non-psychological nature are handled by the Academic Dean, the Deans of Men and Women, spiritual advisors to college religious organizations, and faculty advisors. The College recognizes that collegiate work is often done under conditions of stress, and all faculty members are advised to make themselves available for student conferences should a student so request.

The College Health Service and the administration of the College are not responsible for students who are injured or become ill while on the campus during the college day, or who are injured while participating in class activities, college sports, or extra-curricular programs. However, special college insurance is available to students at a modest cost for such injuries and the college nursing staff, the college physician, and members of the Health and Physical Education Department will render immediate first aid to the sick or injured until the student can obtain his personal physician or contact his parents. Hospitalization and medical treatment are obtained for the student only upon permission of the student's parents or guardians and at their expense.

Students living in Corcordia Hall must notify the College Health Service or the Dean of Women when they are ill and unable to attend classes. If the student's condition warrants, parents are notified to take the student home or to grant permission to transfer the student to a local hospital. No student is permitted to remain in a dormitory room more than twenty-four hours because of serious illness. All students residing in private homes or apartments of their own choosing are responsible to their parents for their health and safety. The College Health Service is not responsible for students' personal health and safety when the College is not in session. In compliance with Chapter 71, Section 55B, General Laws of the Commonwealth, all students must have a chest X-ray or tuberculin test every three years at the Board of Health, Lowell, Massachusetts

or at such other appropriate health facility or physician's office as is convenient for the student.

The College Counseling Service is located in Concordia Hall and is staffed by professional counselors. In addition to psychologists, the Counseling Service employs the services of a psychiatrist, who is available for staff consultation on a weekly basis. A close relationship with the Lowell Mental Health Center has been established for referral and consultative purposes.

The Service offers individual and group counseling to students for situations involving academic pressure, family conflict, emotional distress, and vocational indecision. Any student wishing to discuss a problem with a counselor should make an appointment with one of the staff members of the Counseling Service.

STUDENT PLACEMENT SERVICES

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The College does not provide the services of a comprehensive placement bureau but the Office of the Academic Dean has been authorized by the Board of Trustees to establish limited placement facilities through a self-sustaining trust. Each graduating senior is required to pay a \$5.00 placement fee, for which he is entitled to twelve mailings of his undergraduate file to graduate schools and prospective employers.

Any graduating senior who desires to utilize the placement facilities of the College should supply the Office of the Academic Dean with the names of three faculty members who have agreed to recommend him to graduate schools or prospective employers. The Office of the Dean will supply appropriate faculty members with recommendation forms and will file completed recommendation forms in the student's undergraduate dossier.

A registered applicant may elect to maintain an active placement file after he has exhausted his initial fee by paying an additional \$5.00. Within the limitations of current facilities, a registered alumnus who maintains an active file with the Placement Office may have his file updated by requesting employers or graduate instructors to file additional letters of recommendation. Such letters must be submitted on special forms which have been sent to concerned individuals at the request of the applicant.

OFF-CAMPUS HOUSING

Male students (and female students for whom dormitory space is not available) may reside in off-campus housing. The Registrar's office maintains a list of rooms and apartments in the surrounding area and will assist a student in locating off-campus housing. It is the student's responsibility, however, to choose a residence and to make final housing arrangements. Freshmen planning to live off campus are advised to visit the Lowell area during the summer and to make their housing arrangements then. Off-campus students who wish to participate in cafeteria dining plans may do so.

RELEASE OF STUDENT INFORMATION

The student's name, dates of attendance, curriculum, degrees earned, and honors granted are considered public information and will be routinely released to agencies or persons outside the college community. The policies enumerated below are in effect for releasing other types of student information.

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1. Student information such as address, telephone number, and age will be confirmed only. No information concerning a student other than that which appears in the College roster will be verified by telephone.
2. Transcripts are released only upon the student's request and to whomever he designates.
3. Grade reports are mailed only to the concerned student but also will be released to parents or guardians upon their request. The College will honor individual student requests to withhold grade reports from parents or guardians only when such requests have been made in writing to the Registrar and have been made by students who satisfy the requirements of the Commonwealth for legal adult or emancipation status.
4. Upon the written authorization of a concerned student, representatives of outside agencies (including governmental agencies) may see the permanent academic record card or a copy of this record may be sent to them.
5. Placement dossiers will be open only to bona fide employers and copies of such records will be mailed only to potential employers at their professional or business addresses. The signature of a student on documents filed with the Placement Office will be considered as written authorization by the student to forward placement papers to potential employers until such time as a student revokes such authorization in writing.

6. In the interests of research and public information, officers of the College will release academic, demographic, and financial information to bona fide groups, institutions, and agencies provided that individual anonymity will be guaranteed.
7. The officers of the College may release academic information concerning individual students in the interests of financial assistance or honorary recognition of the student.
8. Except upon the order of a court of competent jurisdiction, communications and data based upon privileged communications as recognized by Massachusetts law shall not be released under any circumstances. Communications and data based upon other confidential relationships may not be released to agencies or persons outside the college community except for good cause related to the safety of persons or the protection of property.
9. Data concerning the financial status of an individual student is not released to agencies or person outside the college community except in the interests of securing the discharge of individual indebtedness to the College within the provisions of applicable state and federal law.
10. Except as provided by applicable state and federal law, nothing in the enumeration of the above policies shall be regarded as imposing constraints upon authorized members of the college community to discharge their professional responsibilities.

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STUDENT MAIL

All student mail is delivered to the office of the Student Government Association. Students who use the college address on their outgoing correspondence should check with personnel of the Student Government Association for their incoming mail.

BOOKSTORE

All texts and materials for courses may be purchased in the College Bookstore, which is located in the basement of the Education Building. Paperback books, dictionaries, class supplies, college insignia, and informal wearing apparel are also on sale.





UNDERGRADUATE STUDENT ACTIVITIES

STUDENT GOVERNMENT ASSOCIATION

Student affairs are under the jurisdiction of the College Senate and an active Student Government Association. Subject to the approval of the President of the College, the Student Government Association is responsible for allocating the Student Activity Fee to the several campus organizations. The following is a listing of organizations generally open to all students.

The Student Council, the elected body of the Student Government Association, meets weekly to allocate and manage student finances, to develop policies relating to student welfare, and to plan, organize, and coordinate all student activities.

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STUDENT PUBLICATIONS

The **ADVOCATE** is an independent, privately incorporated, journal of student opinion which is published regularly throughout the academic year by students of the College. In addition to providing an independent avenue of student opinion, the **ADVOCATE** also provides students who are interested in journalism with opportunities to learn reporting, layout, and other publication skills.

The **KNOLL**, the undergraduate yearbook, is a permanent record of the events and activities which have taken place on and off the campus during the year. The staff of the **KNOLL** is elected each year by the students of the College. Payment of the Student Government Activities Fee and Class Dues entitles each senior to a free copy of this publication.

PEGASUS, a biannual journal of the creative arts, seeks to encourage student creativity in art, poetry, non-fiction, fiction, music, and photography. All students in good standing with the Student Government Association are invited to submit material.

DRAMA AND MUSIC ORGANIZATIONS

The **DRAMA CLUB**, membership in which is open to all interested students, affords its members with acting opportunities and with directing, staging, lighting, and costuming experiences. The Drama Club presents two major and several minor productions each year.

MENC is an active student chapter of the Massachusetts Music Educators Association, and is an affiliate of the Music Educators National Conference. Membership in the college chapter of **MENC** entitles students to state and national membership and to a subscription of the **MUSIC EDUCATORS JOURNAL**. In addition to social gatherings and outings, **MENC** sponsors a major musical production during the spring semester.

The **JAZZ SOCIETY** promotes good music in all modern idioms and furthers musical self-expression by presenting two annual jazz concerts for the college community. The Jazz Society features both band and ensemble groups.



ATHLETIC AND RECREATIONAL ORGANIZATIONS

The **MEN'S ATHLETIC ASSOCIATION** seeks to unite the male students of the College for the purpose of athletic and social activities. The programs of the Association include intramural sports as well as varsity baseball, basketball, cross country, golf, tennis, and wrestling. Social functions include a freshman reception, dances, cookouts and an annual awards banquet.

The **WOMEN'S RECREATIONAL ORGANIZATION** seeks to promote a permanent interest in physical recreation through intramural and varsity sports programs. Some of the intramural activities are fencing, golf, gymnastics, softball, swimming, and tennis. Varsity sports include archery, basketball, field hockey, judo, and volleyball. In addition to sponsoring women's sports activities, the Organization also has an active social schedule and a community-service program. The **WRO Board** is elected by the students of the College in the spring semester each year.

The **ALPINE SKI CLUB** seeks to promote good fellowship and a wider interest in skiing for the students of the College. Ski trips to nearby mountain resorts, and dances and social gatherings are some of the events which help to make membership in this organization an attractive social venture. Membership is conferred upon students after payment of dues. Meetings of this club are held monthly.

The **CHESS CLUB** promotes competition among students of the College through intramural and inter-collegiate levels. Membership is open to all students upon payment of club dues.

SPECIAL INTEREST ORGANIZATIONS

ALPHA OMEGA is a social and service sorority open to women students of the College on an invitation basis. Candidates are judged according to academic standing and demonstrated devotion to the principles of integrity, loyalty, and co-operativeness. The aim of the sorority is the development of a well-rounded personality and a happy and socially concerned individual.

The **ATHENAEUM SOCIETY** is open to all science majors and seeks to promote an interest in science on campus, to provide opportunity for science research, and to assist the Science Department of the College in science education.

CERCLE FRANCAIS is open to all French majors and to other students interested in French civilization and culture. The organization affords students and faculty with opportunities for informal gatherings where the French language may be spoken and for attending cultural events in the metropolitan Boston area.

The **CURRENT ISSUES** and Affairs organization is designed to encourage the investigation of current affairs and to provide interested students with the opportunity for presenting their views to fellow students. The organization sponsors public forums, debates, colloquia, and social events.

HEPAESTUS is a student organization open to any student of the College who is interested in art. The programs of this organization include social events and exhibitions of student and faculty work in the Whistler House.

KAPPA DELTA PHI is a social fraternity for male students of the College and is open to all male students on an invitation basis. The aims of the fraternity are the promotion of friendship, social service, and well-rounded social life.

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SIGMA KAPPA EPSILON is a social sorority for women students of the College and is open to all women students on an invitation basis. The aims of the sorority are the promotion of sociability, mutual understanding within the College community, and the ideals of integrity and honesty.

The **STUDENT NURSE ASSOCIATION** is open to all interested students and seeks to promote both a general and professional interest in nursing.

RELIGIOUS ORGANIZATIONS

The **HILLEL SOCIETY**, which draws membership from the Lowell Technological Institute and Lowell State College, is an organization for Jewish students. Meetings of a religious and social nature are held regularly.

The **IONA FELLOWSHIP** is a religious organization for members of the Lowell Technological Institute and the Lowell State College communities. Although chiefly an organization for members of Protestant religious bodies, the Iona Fellowship is non-denominational. A supper meeting for members is held monthly in addition to periodic religious and social activities.

The **NEWMAN CLUB** is open to interested Catholic students from the Lowell Technological Institute, Lowell State College, and the Lowell General Hospital School of Nursing and other students of these institutions who may wish to participate in the various Newman programs. Folk Masses are held each Sunday at 11:30 a.m. at the Newman Center, 52 Colonial Avenue, Lowell. Daily Mass at the Newman Center is held at 12:10 p.m. and Holy Day Masses at 11:10 a.m. and 12:10 p.m. Various Seminars, speakers, films, and discussions are scheduled weekly at the Newman Center, and films, live music, entertainment, records and refreshments are provided each Wednesday at 7:30 in the Center basement. Rev. Paul Walsh, the full-time chaplain, is available at the Center each week-day from 11:30 a.m. to 11 p.m. and at other times at St. Rita's Rectory, 158 Mammoth Road, Lowell. The Newman Center is open from 11 a.m. to 11 p.m. each day and all students, regardless of denomination or religious persuasion, are invited to use the library and recreational facilities.

The **PHANAR CLUB** is open to Eastern Orthodox students from the greater-Lowell colleges. It has as its purpose the fostering of spiritual and intellectual values among its membership through the perpetuation of Christian precepts. Regular religious and social activities are held for members in local churches and affiliated colleges.



UNDERGRADUATE PROGRAMS OF THE COLLEGE

Basic to the design of all undergraduate degree curricula are a set of Uniform College Requirements and a major concentration or specialization. In addition to specifying minimum residence and performance standards, the Uniform College Requirements also impose specific course distributions in four areas (physical and biological sciences, behavioral and social sciences, the humanities, and symbolics and language). Although the distribution requirements provide each student with ample opportunity to develop individualized programs of general study according to his needs and interests, the major thrusts of such requirements are general in nature and broad in scope. Since education in the general sense relates to community life rather than to private and specialized activity, the Uniform College Requirements have been defined by reference to life processes, historical and social forces, and cultural movements rather than by reference to individual interests, demands or competences. Thus these Uniform College Requirements seek to provide an integrative experience for all undergraduates, to promote an appreciation for the several modes of conceptualization and methodological procedures of the major academic disciplines, and to develop a basic understanding of our cultural and scientific heritage. Regardless of individual choices of major concentration or specialization, all graduates of the College should develop an understanding of those organizations and institutions which are the sources of his social and cultural values, and a realization of the import of scientific developments for his life and his environment.

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The concentrations and minor areas of study in particular disciplines seek to develop that ability to use specialized concepts and skills with the independence and judgment which accrues from a penetrating study of a particular area of knowledge. The program by which a student achieves his specific educational goals must depend, of course, upon personal considerations, but courses of study must be rationally defensible and must evidence orderly development. In determining program requirements, the several departments of the College have operated upon two common assumptions: (a) that isolation of disciplinary concentrations from the contexts of a general liberal background is conducive to

provincialism and on the undergraduate level is generally unsound and (b) that teaching programs at all levels are more productive when intellectual capacities have been developed within the contexts of particular disciplines. Professional programs whose requirements are determined by professional associations and accrediting agencies do not permit the degree of flexibility which is provided in most undergraduate curricula.

In order to conveniently distinguish the different program requirements of the various undergraduate curricula, the characterizations of collegiate programs appearing on the following pages employ three special terms, each of which is defined below.

DEFINITION OF SPECIAL TERMINOLOGY

An area of specialization refers to baccalaureate majors in Medical Technology and Nursing for the Bachelor of Science degree and to Music-Education, Musicology, Music Theory, and Performance programs for the Bachelor of Music degree. Course work delimited by areas of specialization exceeds that which is permitted in other major programs of the College and is largely determined by the professional requirements of national organizations and accrediting agencies. Courses which are taken to satisfy the Uniform College Requirements for General Education or minor area of study requirements may not be credited to specializations.

An area of concentration refers to a baccalaureate major of 30-45 semester hours of course work which is required for Bachelor of Arts and Bachelor of Science degrees in the Humanities (American Studies, [with Humanities emphasis], Art, English, French, Music, Philosophy, and Spanish), the Social Sciences (American Studies, [with Social Science emphasis], History, Political Science, Psychology, and Sociology), and the Natural Sciences (Biology, Environmental Science, and Mathematics). Courses which are taken to satisfy the Uniform College Requirements for General Education or minor area of study requirements may not be credited to concentrations. Students may not present more than 45 hours in any concentration area unless they present more than the established credit minimum (120 semester hours) for graduation. The number of credits beyond the concentration limit must be matched with an equal number of credits beyond the graduation minimum.

A minor area of study refers to 18-24 semester hours of prescribed or recommended course work in specific disciplines, interdisciplinary studies, and related studies programs. The requirements for specific minors are outlined in the introductory statements of concerned departments of the College. All interdisciplinary studies except Behavioral Sciences consist of course work drawn from at least three disciplines and require minimal course distributions in sub-areas of 3, 6, and 9 semester hours. As part of the requirements for minor programs, all students must elect at least 6 semester hours of courses which are on or above the "300" level.

UNIFORM COLLEGE REQUIREMENTS FOR UNDERGRADUATE STUDY

General Degree Requirements

In order to qualify for a baccalaureate degree offered by Lowell State College, each undergraduate must obtain a 2.00 ("C") cumulative average in his total undergraduate courses of study, must present a minimum of 120 semester hours of course work for graduation, must conform to College rules governing specific baccalaureate degrees and major studies for such degrees, and must earn a 2.20 average in his major area of concentration or specialization by the end of his senior year.*

COMMONWEALTH GOVERNMENT REQUIREMENT

All undergraduate students must satisfy the special government requirement imposed by the laws of the Commonwealth of Massachusetts by passing any one of the following courses: PO 101--Introduction to Politics, PO 111--Introduction to American Politics, PO 225--State Government, and PO 238--American Political Thought. The course work cited above may be completed as part of the Behavioral and Social Sciences Distribution Area, Additional General Education Requirements, Political Science major or minor programs, or unrestricted elective course options.

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ENGLISH COMPOSITION REQUIREMENT

All freshmen must pass the basic writing program specified by EN 101--English Composition unless specifically exempted by the English Department on the basis of a written English proficiency examination. EN 101 may be taken as part of the course work for the Symbolics and Language Distribution Area or as part of the course work specified by the Additional General Education Requirements.

HISTORY AND LITERATURE REQUIREMENT

Each undergraduate must present 6 semester hours of history courses and 6 semester hours of literature courses as part of his total BACCALAUREATE PROGRAM. Literature courses may be selected from the literature offerings of the English and Language Departments. History courses must be taken from the history offerings of the Department of History and Political Science. Course work for this requirement may be completed within the provisions for Distribution Requirements, Additional General Education Requirements, major or minor

* Students who have failed to achieve a 2.00 average in their major concentrations or specializations by the end of their junior year (typically 27 hours in the major of 89 hours undertaken) have not made satisfactory progress toward their degrees, and upon the recommendation of appropriate departmental committees and the concurrence of the Academic Standards Committee, such students are dismissed from the College for inadequate scholarship.

programs with literary or historical orientations, and unrestricted elective course options.

PHYSICAL ACTIVITIES REQUIREMENT

All students must successfully complete one year of supervised physical activity within the program specified by PE 001 and 002. Any student who fails to satisfy the requirements for PE 001 and / or PE 002 by the end of the freshman year must repeat these courses until such time as he has passed them. Grades for PE 001 and 002 are awarded on a "pass-no record" basis and carry no academic credit. Students who have not passed the physical education requirement by the end of their senior year are advised that graduation will be denied until such time as the requirement is satisfied. Students who are veterans or who are 23 years of age or over at the time of admission to the College may at their option be excused from the physical activity requirement. A student who is physically unable to participate in strenuous exercise may be excused from the activity requirement upon written confirmation of his condition by a physician.

General Education Requirements

All undergraduate students must present a broad distribution of courses selected from the offerings of several departments and according to the regulations enumerated below. No course may be counted more than once for General Education, major, minor, or elective programs. To fulfill requirements for General Education, each student must present a minimum of 13 courses and 39 semester hours. For purposes of this requirement, a course is defined as carrying a credit assignment of 2 to 5 semester hours.

1. AREA DISTRIBUTION REQUIREMENTS

All undergraduate students must elect two courses in each of the distribution areas listed below, except that in satisfying the Area Distribution Requirements they may not select courses which are within their areas of concentration or specialization and may not count course work which is presented for minor studies or programs of elective courses.

AREA I BEHAVIORAL AND SOCIAL SCIENCES

EC 101--Principles and Problems of Economics I
EC 102--Principles and Problems of
Economics II
EC 202--Problems in Economic Development
EC 221--Urban Economics
GE 101--World and Regional Geography
GE 226--Geography of the United States and
Canada

GE 234--Human Geography
HI 101--Classical Civilization
HI 105--European History to 1715
HI 106--European History since 1715
HI 111--United States History to 1877
HI 112--United States History since 1877
HI 213--Europe in the Middle Ages
HI 217--Renaissance and Reformation
HI 218--Europe in 17th & 18th Centuries
HI 221--Europe in the 19th Century
HI 222--Europe in the 20th Century

HI 225--Ancient Greek History and Civilization
 HI 226--Roman History and Civilization
 HI 246--Afro-American History
 HI 254--France since 1814
 HI 264--Ancient Egypt
 PH 281--Law and Morality
 PH 282--Political Theory
 PH 283--Philosophy of Mind & Personality
 PO 101--Introduction to Politics*
 PO 111--Introduction to American Politics*
 PO 225--State Government*
 PO 226--Municipal Government
 PO 238--American Political Thought*
 PO 282--Modern Political Theory
 PS 101--General Psychology
 PS 161--Child Growth and Development
 PS 162--Psychology of Adolescence
 PS 163--Developmental Psychology
 SO 101--Introduction to Sociological Analysis
 SO 201--Social Anthropology
 SO 222--Contemporary Social Problems

* Courses marked "*" satisfy the Commonwealth Government Requirement.

AREA II HUMANITIES

AH 201--Introduction to the Visual Arts
 AH 202--Survey of Art
 AH 211--American Art
 AH 213--Art of Non-European Cultures
 AH 221--Twentieth Century Art
 EN 132--Types of Literature +
 EN 141--Great Books of Antiquity
 EN 143--Great Books of the Middle
 Ages and Renaissance
 EN 145--Great Books of the Modern Period
 EN 201--Drama
 EN 202--Poetry
 EN 204--Prose Fiction
 EN 206--Major Literary Movements
 EN 208--Literature and the Mass Media
 EN 211--Literature of the Bible
 EN 212--Continental Fiction in Translation
 EN 214--Literature of Religious Experience
 EN 251--Comedy
 EN 252--Tragedy
 EN 253--The Epic

FR 321--Cultural Background and Survey of
 French Literature I*
 FR 322--Cultural Background and Survey of
 French Literature II*
 GM 301--Cultural Background of German
 Literature I*
 GM 302--Cultural Background of German
 Literature II*
 GM 311--German Literature to 1800*
 GM 312--German Literature since 1800*
 GK 301--Greek Classics*
 GK 302--Greek Classics II*
 LA 301--Latin Classics I*
 LA 302--Latin Classics II*
 MU 171--Music of Western Civilization
 MU 271--Music History and Literature to Bach
 MU 272--Music History and Literature since
 Bach
 MU 276--Survey of American Music
 PH 201--Introduction to Philosophy
 PH 251--Ancient Philosophy
 PH 252--Medieval Thought
 PH 254--Philosophy & the 20th Century
 PH 261--Oriental Philosophy
 PH 284--Philosophies of Art & Beauty
 SP 321--Cultural Background & Survey
 of Spanish Literature I*
 SP 322--Cultural Background & Survey
 of Spanish Literature II*
 SP 331--Cultural Background & Survey of
 Latin-American Literature I*
 SP 332--Cultural Background & Survey of
 Latin-American Literature II*

+EN132--Types of Literature is a corequisite or prerequisite for all literature courses offered by the English Department. EN 101--English Composition or equivalent is a prerequisite for EN 132.

*Courses marked " *" assume appropriate language proficiency.

AREA III LANGUAGE AND SYMBOLICS

EN 101--English Composition
 EN 222--General Semantics
 EN 223--History and Development of the
 English Language
 EN 224--Analysis of Modern English
 FR 101-102--Beginning French*

FR 211-212--Intermediate French *
 FR 221-222--Reading and Conversing
 FR 231-232--Spoken French
 FR 241-242--Intensive French
 FR 251-252--Advanced Conversation
 GM 101-102--Beginning German*
 GM 211-212--Intermediate German*
 GM 251-252--Advanced German
 GK 101-102--Beginning Greek *
 GK 211-212--Intermediate Greek *
 IT 101-102--Beginning Italian*
 IT 211-212--Intermediate Italian*
 LA 101-102--Beginning Latin*
 LA 211-212--Intermediate Latin*
 MA 101--Modern Mathematics
 MA 103--College Algebra
 MA 104--College Geometry
 MA 105--College Trigonometry
 MA 106--Finite Mathematics
 MA 107--Introduction to Calculus
 MA 201--Calculus I
 MA 202--Calculus II
 MA 206--Elementary Statistical Analysis
 PH 202--Logic I
 PH 203--Logic II
 PH 307--Philosophy of Language
 SP 101-102--Beginning Spanish*
 SP 211-212--Intermediate Spanish*
 SP 221-222--Reading and Conversing
 SP 241-242--Intensive Spanish
 SP 251-252--Advanced Conversation

* Courses marked " * " must be elected for two continuous semesters.

AREA IV LABORATORY SCIENCE

BI 101--Life Science I
 BI 102--Life Science II*
 BI 201,203--Principles of Biology I (4 sh) + §
 BI 202,204--Principles of Biology II (4 sh) + * §
 CH 102--Chemical Ideas
 CH 111--General Chemistry I (4 sh)
 CH 112--General Chemistry II (4 sh)*
 CH 201,207--Principles of Chemistry I (4 sh) + §

CH 202,208--Principles of Chemistry II(4 sh)+* §
 GL 201--General Geology I
 GL 202--General Geology II*
 PY 101--Elements of Physics
 PY 103--General Physics I
 PY 104--General Physics II*
 PY 111--The Physical Environment I
 PY 112--The Physical Environment II*
 PY 201--Principles of Physics I (4 sh)+
 PY 202--Principles of Physics II (4sh)+*
 PY 212--Earth Science*
 PY 215--Astronomy I
 PY 216--Astronomy II*

Students may not receive credit for courses which cover the same basic content. Specifically, credit may not be granted for more than one course in each of the following groupings:

(1) BI 101, BI 201; (2) BI 102, BI 202;
 (3) CH 102, CH 111, CH 201; (4) PY 101, PY 103,
 PY 201; (5) PY 104, PY 202; (6) PY 111,
 PY 212; (7) PY 112, PY 212.

* Courses marked " * " have a first-semester prerequisite. All other courses may be taken in any order and need not be elected consecutively.

+Courses marked "+" are specifically designed for science concentrators but may be elected by the general student who has had the proper secondary-school background. Students who intend to major in Biology or Medical Technology or to minor in Chemistry should elect PY 201-202 to satisfy the Area IV requirement. Students who plan to major in Environmental Science should elect PY 103-104 or PY 201-202 to satisfy the requirement for Area IV.

§ Courses with separate laboratory and lecture provisions must be presented with both lecture and laboratory to satisfy General Education Course requirements.

2. ADDITIONAL GENERAL EDUCATION REQUIREMENTS

All students must select 5 courses and 15 semester hours of additional course work (OUTSIDE THEIR MAJOR SUBJECT AREAS AND INDEPENDENT OF THEIR MINOR STUDIES) from the Liberal-Arts offerings of the College. (Specifically excluded are all courses of a professional or performance nature, such as Applied Music, Education, Medical Technology, and Nursing.) Courses in English Composition and Government which are required by the General Degree Requirements may be presented for the Additional General Education Requirements. History and literature courses which are required by the General Degree Requirements may also be presented without reference to course listings of the Area Distribution Requirements and without restriction to course level.

DESCRIPTIONS OF BACCALAUREATE DEGREES

Bachelor of Arts

The Bachelor of Arts degree provides a broad, comprehensive education with many options for developing major and minor programs and ordinarily provides sufficient preparation in the Humanities for teaching in the elementary and secondary schools or for acceptance into those graduate programs which require students to possess a general liberal-arts background. Students who matriculate for the Bachelor of Arts degree ordinarily pursue major concentrations in the Humanities (American Studies [with a Humanities emphasis], Art, English, French, Music, Philosophy, and Spanish). They may also pursue major concentrations in the Social Sciences (American Studies [with a Social Science emphasis], History, Political Science, Psychology, and Sociology) and Natural Sciences (Biology, Environmental Science, and Mathematics) if degree options for supporting concentrations, minor studies, and elective courses are selected from the areas of the Humanities.

DEGREE REQUIREMENTS

1. Candidates for the degree of Bachelor of Arts must satisfy all the regulations of the Uniform College Requirements.
2. Bachelor of Arts candidates must present a program of major studies in accordance with the following criteria.
 - a. They may pursue a major concentration of 30-45 hours of course work in one of the Humanities (American Studies [with a Humanities emphasis], Art, English, French, Music, Philosophy, and Spanish) when electing one of the program options cited below.
 - (1) Concentrators in areas of the Humanities may elect a supporting concentration in a second area of the Humanities, in one of the Social Sciences (American Studies [with a Social Science emphasis], History, Political Science, Psychology, or Sociology) or in Mathematics. A supporting concentration in American Studies is not available as an option to English concentrators. Nor is a supporting concentration in English, History, Political Science, or Sociology available as an option to American Studies concentrators.
 - (2) Humanities concentrators may petition for admission to the teacher-education program in Elementary Education upon successful completion of the specified entrance requirements. (Music students may not petition for the Elementary Education program. Students interested in the teaching of Music should apply for the Music Education program of the Bachelor of Music degree.)
 - (3) In accordance with the requirements of established minor programs, concentrators in areas of the Humanities may undertake a minor from those areas cited below which are distinct from the disciplines comprising their major concentrations.

American History	Earth Science	Music History
American Literature	English	Philosophy
Art	English Literature	General Science
Behavioral Sciences	French	Political Science
Biology	German	Psychology
Chemistry	History	Social Science
Classical Civilization	Mathematics	Sociology
Drama		Spanish

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 - (4) Upon the approval of appropriate department chairmen and faculty advisors, concentrators in areas of the Humanities may develop a related minor area of study in accordance with their needs and interests for the purpose of providing greater personal and professional relevance to their major concentrations. Such programs may be developed from any number of disciplines but must include at least 6 semester hours of courses which are on or above the "300" level.

- (5) Upon the completion of established requirements for admission to teacher-education programs, students electing a concentration in American Studies (with a Humanities emphasis), Art, English, French, or Spanish may apply for entrance to that program in Secondary Education cited below which is cognate to their major concentrations:

Art Education English Education Language Education

- (6) Upon the approval of appropriate faculty advisors, concentrators in areas of the Humanities may pursue programs of elective courses which are suitable to their needs and interests, except that 6 semester hours of such programs must be taken in courses on the "300" and "400" levels.
- b. Bachelor of Arts candidates may pursue a major concentration of 30-45 hours of course work in an area of the Social Sciences (American Studies [with a Social Science emphasis], History, Political Science, Psychology, and Sociology) or the Natural Sciences (Biology, Environmental Science, and Mathematics) when electing one of the program options cited below.

- (1) Concentrators in areas of the Social Sciences and Mathematics may elect a supporting concentration in an area of the Humanities (American Studies [with a Humanities emphasis], Art, English, French, Music, Philosophy, and Spanish). A supporting concentration in American Studies is not available as an option to History, Political Science, or Sociology concentrators. Nor is a supporting concentration in English, History, Political Science, or Sociology available as an option to American Studies concentrators.

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- (2) In accordance with the requirements of established minor programs, concentrators in areas of the Social Sciences and the Natural Sciences may undertake a minor from those areas cited below which are distinct from the disciplines comprising their major concentrations.

American Literature	English	German
Art	English Literature	Music History
Classical Civilization	French	Philosophy
Drama		Spanish

- (3) Upon the approval of appropriate faculty advisors, concentrators in areas of the Social and Natural Sciences may pursue programs of elective courses in areas of the Humanities which are suitable to their needs and interests, except that 6 semester hours of such programs must be taken in courses on the "300" and "400" levels.
3. Although the College does not require language proficiency for the Bachelor of Arts degree, each department has the prerogative of specifying a level of language proficiency as a collateral requirement for major studies. Concentrators in English and History are required to evidence intermediate proficiency in French, German, Greek, Italian, Latin, or Spanish. Students concentrating in American Studies, Biology, Environmental Science, Mathematics, Philosophy, Political Science, Psychology and Sociology who

anticipate further studies in their areas of concentration at the graduate level are strongly advised to develop an intermediate reading proficiency in French or German. American Studies and Art concentrators who wish to pursue graduate training in related continental studies or in the area of art history should develop a reading proficiency at the intermediate course level in French, German, Italian, or Spanish. Political Science and Sociology concentrators are urged to develop an intermediate speaking proficiency in French or Spanish if they anticipate public-service careers. Students who are required to evidence intermediate proficiency as a collateral requirement of their major studies and students who desire to present official evidence of language proficiency for purposes of employment or application to graduate schools may satisfy the expectations of the College for intermediate language proficiency through any one of the options cited below:

- a. a score of "550" or above on a College Entrance Examination Board Achievement Test;
- b. a score of "5," "4," or "3" on a College Entrance Examination Board Advanced Placement Examination;
- c. a satisfactory score in a proficiency test prepared and administered by the Language Department of Lowell State College (preferably during the student's freshman year) and covering a reading knowledge of French, German, Greek, Italian, Latin, or Spanish;
- d. passing two semester courses on the intermediate, second-year college level in a language previously studied in the secondary school and offered by Lowell State College; or
- e. passing a minimum of 12 semester hours in one language, the study of which is initiated at Lowell State College.

The College does not require students pursuing the Bachelor of Arts degree to declare their major concentrations until the end of their sophomore year, but an early decision by a student will greatly facilitate the selection of appropriate prerequisite courses for major studies and accordingly will reduce the possibilities of time-consuming errors in judgment. A student who makes no declaration of major concentration prior to the end of the sophomore year is listed as an "undeclared" student for his first two years. Students who anticipate applying for the teaching program in Elementary Education should carefully review the prerequisite course requirements and admission standards for this program and should not delay declaration of an academic concentration beyond the second semester of the freshman year.

Once a student has begun a program of concentration(s), he may change his concentration option providing that he receives the permission of his advisor(s) and the approval of the chairmen and / or directors of concerned departments or programs. He may also change his minor study when changing his concentration and he may substitute alternative minor programs without changing his concentration. Such changes are subject to the established regulations governing concentrations and program options. Students who make substantial changes in

their plans of study may find it necessary to redesignate their choice of degree. Additional course work beyond the minimum 120 semester hours and extension of the normal four-year period of study may be expected for students who change their concentration options later than the first semester of their junior year. Students wishing to satisfy requirements of the Bachelor of Science degree and Music concentrators who wish to undertake programs of the Bachelor of Music degree may do so within the provisions governing candidacy for a second degree. Such students must meet the admission requirements of the programs to which they apply and must satisfy all prerequisite and major course work specified by the concerned curriculum which is undertaken for a second degree. For further information, consult the regulations governing "Full-Time Programs for Candidates for a Second Degree" which appear elsewhere in this catalogue under the heading for Undergraduate Admission Policies.

Bachelor of Science

The Bachelor of Science degree is awarded to students who declare major concentrations in the Social Sciences (American Studies [with a Social Science emphasis], History, Political Science, Psychology, or Sociology), and the Natural Sciences (Biology, Environmental Science, and Mathematics) and who also pursue supporting concentrations, minor studies, and/or elective courses in related Social Science and Natural Science areas. The Bachelor of Science degree is also awarded to students who declare major specializations in Medical Technology and Nursing. Bachelor of Science programs in the Social and Natural Sciences ordinarily provide sufficient preparation in major areas for teaching in the elementary and secondary schools or for acceptance into those graduate programs which require students to possess a specialized background. Satisfactory completion of the Medical Technology specialization qualifies students for the medical technology certificate examinations administered by the Registry of Medical Technologists of the American Society of Clinical Pathologists and for graduate study in Medical Technology. The Nursing specialization qualifies students for the examinations administered by the Massachusetts Board of Registration in Nursing and for graduate study in nursing education, supervision, administration, or clinical specialization.

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DEGREE REQUIREMENTS

1. Candidates for the degree of Bachelor of Science must satisfy all the regulations of the Uniform College Requirements.
2. Bachelor of Science candidates must present a program of major studies in accordance with the following criteria.
 - a. They may pursue a major concentration of 30-45 hours of course work in an area of the Social Sciences (American Studies [with a Social Science

emphasis], History, Political Science, Psychology, or Sociology) when electing one of the program options cited below.

- (1) Concentrators in areas of the Social Sciences may elect a supporting concentration in a second area of the Social Sciences, in Chemistry, or in Mathematics. A supporting concentration in American Studies is not available as an option to History, Political Science, or Sociology concentrators. Nor is a supporting concentration in History, Political Science, or Sociology available as an option to American Studies concentrators.
- (2) Concentrators in areas of the Social Sciences may petition for admission to the teacher-education program in Elementary Education upon successful completion of the specified entrance requirements.
- (3) In accordance with the requirements of established minor programs, concentrators in areas of the Social Sciences may undertake a minor from those areas cited below which are distinct from the disciplines comprising their major concentrations:

American History	Earth Science	Political Science
Behavioral Sciences	History	Psychology
Biology	Mathematics	Social Science
Chemistry	General Science	Sociology

- (4) Upon the approval of appropriate department chairmen and faculty advisors, concentrators in areas of the Social Sciences may develop a related minor area of study in accordance with their needs and interests for the purpose of providing greater personal and professional relevance to their major concentrations. Such programs may be developed from any number of disciplines but must include at least 6 semester hours of courses which are on or above the "300" level.
- (5) Upon the completion of the established requirements for admission to teacher-education programs, students concentrating in American Studies (with a Social Science emphasis), History, Political Science, and Sociology may apply for entrance to the Secondary Education program in Social Science Education. Psychology and Sociology concentrators may also apply for entrance to the Secondary Education program in Behavioral Science Education. +

+ Students who also present a second concentration or minor in an area of the Humanities may qualify for the Bachelor of Arts degree.

- (6) Upon the approval of appropriate faculty advisors, concentrators in areas of the Social Sciences may pursue programs of elective courses in Social and Natural Science areas which are suitable to their needs and interests, except that 6 semester hours of such programs must be taken in courses on the "300" and "400" levels.
- b. Bachelor of Science candidates may pursue a major concentration of 30-45 hours of course work in Biology, Environmental Science, or Mathematics when electing one of the program options cited below.

- (1) Concentrators in Mathematics may elect a supporting concentration in an area of the Social Sciences or Chemistry. Biology concentrators may elect a supporting concentration in Chemistry or Mathematics.
- (2) Concentrators in Environmental Science and Mathematics may petition for admission to the teacher-education program in Elementary Education upon successful completion of the specified entrance requirements.
- (3) In accordance with the requirements of established minor programs, concentrators in Biology, Environmental Science, or Mathematics may undertake a minor from those areas cited below which are distinct from the disciplines comprising their major concentrations:

American History	Earth Science	Political Science
Behavioral Sciences	History	Psychology
Biology	Mathematics	Social Science
Chemistry	General Science	Sociology

- (4) Upon the approval of appropriate department chairmen and faculty advisors, concentrators in Biology, Environmental Science, or Mathematics may develop a related minor area of study in accordance with their needs and interests for the purpose of providing greater personal and professional relevance to their major concentrations. Such programs may be developed from any number of disciplines but must include at least 6 semester hours of courses which are on or above the "300" level.

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- (5) Upon the completion of the established requirements for admission to teacher-education programs, students concentrating in Biology, Environmental Science, and Mathematics may apply for entrance to that program in Secondary Education which is cognate to their major concentrations:

Science Education

Mathematics Education+

- (6) Upon the approval of appropriate faculty advisors, concentrators in areas of the Natural Sciences may pursue programs of elective courses in Social and Natural Science areas which are suitable to their needs and interests, except that 6 semester hours of such programs must be taken in courses on the "300" and "400" levels.

+ Students who also present a second concentration or minor in an area of the Humanities may qualify for the Bachelor of Arts degree.

- c. Bachelor of Science candidates who pursue the major specialization in Medical Technology are advised to take a minor in Chemistry.
- d. Bachelor of Science candidates who pursue the major specialization in Nursing may elect one of the following program options.

(1) They may elect minor areas of study in Behavioral Science, Biology, General Science, Psychology, Social Science, or Sociology.

(2) Upon the approval of appropriate faculty advisors, Nursing students may pursue a program of related minor studies in accordance with their needs and interests for the purpose of providing greater personal and professional relevance to their major specialization. Such programs may be developed from any number of disciplines but must include at least 6 semesterhours of courses which are on or above the "300" level.

(3) Upon the approval of appropriate faculty advisors, Nursing students may pursue programs of elective courses which are suitable to their needs and interests, except that 6 semester hours of such programs must be taken in courses on the "300" and "400" levels.

3. Although the College does not require language proficiency for the Bachelor of Science degree, each department has the prerogative of specifying a level of language proficiency as a collateral requirement for major studies. Concentrators in History are required to evidence intermediate proficiency in French, German, Greek, Italian, Latin, or Spanish. Students concentrating in Biology, Environmental Science, Mathematics, Political Science, Psychology, and Sociology who anticipate further studies in their areas of concentration at the graduate level are strongly advised to develop an intermediate reading proficiency in French or German. American Studies concentrators who wish to pursue graduate training in related continental studies should develop a reading proficiency at the intermediate level in French, German, Italian, or Spanish. Political Science and Sociology concentrators should develop an intermediate speaking proficiency in French or Spanish if they anticipate public-service careers. Students who are required to evidence intermediate proficiency as a collateral requirement of their major studies and students who desire to present official evidence of language proficiency for purposes of employment or application to graduate schools may satisfy the expectations of the College for intermediate language proficiency through any one of the options cited below:

- a. a score of "550" or above on a College Entrance Examination Board Achievement Test;
- b. a score of "5," "4," or "3" on a College Entrance Examination Board Advanced Placement Examination;
- c. a satisfactory score in a proficiency test prepared and administered by the Language Department of Lowell State College (preferably during the student's freshman year) and covering a reading knowledge of French, German, Greek, Italian, Latin, or Spanish;
- d. passing two semester courses on the intermediate, second-year college level in a language previously studied in the secondary school and offered by Lowell State College; or
- e. passing a minimum of 12 semester hours in one language, the study of which is initiated at Lowell State College.

Many programs of the Bachelor of Science degree do not require students to declare their major concentrations until the end of their sophomore year, but an early decision by a student will greatly facilitate the selection of appropriate prerequisite courses for major studies and accordingly will reduce the possibilities of time-consuming errors in judgment. A student who makes no declaration of major concentration prior to the end of the sophomore year is listed as an "undeclared" student for his first two years. Students who anticipate applying for the teaching program in Elementary Education should carefully review the prerequisite course requirements and admission standards for this program and should not delay declaration of an academic concentration beyond the second semester of the freshman year. Students contemplating major studies in Biology, Environmental Science, Medical Technology, and Nursing should initiate prerequisite course work in science and mathematics immediately upon entrance to the College and should make a declaration of major studies at this time or prior to the end of the freshman year. Additional course work beyond the minimum degree requirements and extension of the normal four-year period of study may be expected when students make a late declaration of major or change their major programs later than the first semester of their sophomore year.

Once a student has begun a program of concentration(s), he may change his concentration option providing that he receives the permission of his advisor(s) and the approval of the chairmen and / or directors of concerned departments or programs. He may also change his minor study when changing his concentration and he may substitute alternative minor programs without changing his concentration. Such changes are subject to the established regulations governing concentrations and program options. Students who make substantial changes in their plans of study after the beginning of the junior year, regardless of major, will ordinarily find it impossible to complete degree requirements within the normal four-year period of study. Such students may also find it necessary to redesignate their choice of degree.

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Students wishing to satisfy requirements of the Bachelor of Arts degree in addition to those required for the Bachelor of Science degree may do so within the provisions governing candidacy for a second degree. Such students must meet the admission requirements of the programs to which they apply and must satisfy all prerequisite and major course work specified by the concerned curriculum which is undertaken for a second degree. For further information, consult the regulations governing "Full-Time Programs for Candidates for a Second Degree" which appear elsewhere in this catalogue under the heading for Undergraduate Admission Policies.

Bachelor of Music

The Bachelor of Music is offered in four areas of specialization: Music Education, Musicology, Music Theory, and Performance. These specializations are designed to prepare teachers and supervisors of music in the elementary and secondary schools or to provide abundant opportunities for individual performance, research, and creativity to students who wish professional careers in Music.

The professional orientation of Bachelor of Music specializations requires that students declare their intention of majoring in Music upon application for admission to the College and that music course work be undertaken immediately upon entry. All Bachelor of Music candidates pursue a core music program during the freshman year and are required to evidence outstanding musical proficiency for retention. At the end of the freshman or sophomore year, the music faculty will examine each student's progress before recommending sophomore or junior standing. Such review is conducted at the time specified for application to specific music specializations.

Individual and group performances are important aspects of all Bachelor of Music programs, but students in the Performance specialization are required to demonstrate outstanding ability as performers in order to satisfy admission and retention standards. Students in Musicology and Music Theory specializations must demonstrate similar outstanding abilities in their chosen music fields in order to qualify for admission and to satisfy retention standards. Students preparing for admission to the Music Education specialization are required to select applied music courses each semester for maintaining and developing their music skills, and they are expected to develop minimum standards of performance in piano and in their major performance area. The teacher-education components of the Music Education specialization are subject to the rules and regulations of the College governing admission and retention standards for teacher-education programs.

DEGREE REQUIREMENTS

1. Candidates for the degree of Bachelor of Music must satisfy all the regulations of the Uniform College Requirements.
2. Bachelor of Music candidates must complete the specific program requirements as outlined by Courses of Study for Music Education, Musicology, Music Theory, and Performance Specializations or must complete acceptable alternative programs in consultation with the Director of Specializations.
3. Bachelor of Music candidates must satisfy the admission and retention standards which have been established for their specializations.
4. All candidates for the Bachelor of Music degree must satisfy both the participation requirements for music organizations and the senior recital or project requirement.
5. Candidates for the Bachelor of Music degree whose area preference is voice are required to complete two semesters of beginning Italian. Students specializing in Performance whose area preference is voice and students specializing in Musicology and Music Theory are required to complete two semesters of beginning Italian and German.

Once a student has begun a program of Music specialization, he may change his area option providing that he receives the permission of concerned program directors. A student who changes his studies from a non-music major to any of the Bachelor of Music areas may expect to extend his period of study beyond the four-year period. Ordinarily, students may not transfer into Bachelor of Music program from other programs of the College, but such transfer may be permitted for the unusual student early in his academic career.

SUMMARY OF DEGREE OPTIONS

Major Subjects	Degree Options		
	BA	BS	BM
American Studies	x	x	
Art	x		
Biology	x	x	
English	x		
Environmental Science	x	x	
French	x		
History	x	x	
Mathematics	x	x	
Music Concentration	x		
Music Specialization			
Music Education			x
Musicology			x
Music Theory			x
Performance			x
Medical Technology		x	
Nursing		x	
Philosophy	x		
Political Science	x	x	
Psychology	x	x	
Sociology	x	x	
Spanish	x		

SUMMARY OF TEACHER-EDUCATION OPTIONS

Major Subjects	Teacher Education Options				
	Elementary School		Secondary School		Elementary and Secondary Schools
	BA	BS	BA	BS	BM
American Studies	x	x	x	x	
Art	x		x		
Biology				x	
English	x		x		
Environmental Science		x		x	
French	x		x		
History		x		x	
Mathematics		x		x	
Music Concentration					
Music Specialization					
Music Education					x
Musicology					
Music Theory					
Performance					
Medical Technology					
Nursing					
Philosophy	x				
Political Science		x		x	
Psychology		x		x	
Sociology		x		x	
Spanish	x		x		



COURSES OF INSTRUCTION

COURSE PREFIXES

Each course offering listed in this catalogue is designated by a two-letter prefix and a three-digit number. The letter prefixes identify the subjects of courses as noted below. The numbers designate the degrees of specialization and are characterized on the following page. A course carrying a second departmental number in parentheses has been newly numbered for this issue of the catalogue. Students with credit for a course in parentheses are not permitted to enroll in the course under the new number unless the course is stated as being repeatable.

AH	Art History	IT	Italian
BI	Biology	LA	Latin
CH	Chemistry	MA	Mathematics
CL	Classics	ME	Music Education
EC	Economics	MT	Medical Technology
ED	Education	MU	Music
EE	Elementary Education	NU	Nursing
EN	English	PE	Physical Education
ES	Environmental Science	PH	Philosophy
FE	Foundations of Education	PO	Political Science
FE	French	PS	Psychology
GE	Geography	PY	Physical Sciences
GK	Greek	SA	Studio Arts
GL	Geology	SE	Secondary Education
GM	German	SO	Sociology
HI	History	SP	Spanish

COURSE NUMBERING SYSTEM

- 001 - 099 Non-credit courses.
- 101 - 199 Beginning courses not having prerequisites, ordinarily taken by students in the freshman and sophomore years to fulfill the area distributions of the Uniform College Requirements or to obtain an introduction to an area of study.
- 201 - 299 Intermediate courses which are restricted in scope but generally having no specific prerequisites, ordinarily taken by freshman and sophomore students to fulfill the area distributions of the Uniform College Requirements or to initiate work in major subjects.
- 301 - 399 Systematic courses concerned with specialized aspects of a discipline which are ordinarily within major areas of concentration or specialization but are generally open to upper-division students for election; and beginning courses of a professional nature which require special permission of instructors and / or departments to enter.
- 401 - 499 Specialized courses providing intensive analysis of a subject of limited scope which are ordinarily within major areas of concentration or specialization and are generally open to upper-division students for election only with the consent of instructors or departments; directed reading courses, seminars, and advanced courses in prescribed professional sequences which are not open for general election.



ART

Leo Panas, Chairman
Department of Art

The Department of Art offers a major concentration in Art leading to the Bachelor of Arts degree and a supporting concentration in Art for students who can arrange a second concentration. The Department also offers a minor study in Art.

Art Concentration

A concentration in Art contributes to a broad appreciation of the cultural and intellectual efforts of man from his first efforts at communication through pictures to 20th century technology and the visual communications revolution. Although the primary functions of the Art concentration are to promote a broad understanding of art history and to encourage the development of basic competencies in the major studio areas of the visual arts, program options are available to qualified students for teacher education at both the elementary and secondary levels. Students will also find the Art concentration useful in preparing for careers in advertising, technical illustration, photo-journalism, industrial-commercial photography, recreation, packaging, and fashion design.

Concentrations in Art (both the major degree concentration and the supporting second concentration) consist of 30-45 hours of course work and must include the following:

1. Each of the following courses:

AH 201--Introduction to the Visual Arts
SA 211--Design I
SA 221--Drawing I

SA 241--Photography I
SA 321--Painting I
SA 351--Graphics I

2. Three courses selected from the courses listed below:

AH 202--Survey of Art
AH 211--American Art
AH 213--Art of Non-European Cultures

AH 221--20th Century Art
AH 322--Baroque Art

3. The remaining courses for the concentration may be selected from the course offerings of the Department.

Students intending to pursue teaching careers at the elementary or secondary level may apply to appropriate teacher-education programs at the end of their sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for **Education**. Students who anticipate application to the program in Elementary Education should consult the "Course of Study for Elementary Education and Art" and plan their programs accordingly. Art concentrators who pursue the program in Elementary Education are required to take SA 331--Art and the Child as part of their concentration studies. Students who plan to apply for the Secondary Education program in Art Education should consult the "Curriculum Requirements for Secondary Education Programs" and the Director of Art Education to insure that necessary prerequisite course work has been undertaken prior to the specified application dates.

Students transferring to the College and wishing to concentrate in Art must make individual arrangements with the Chairman of the Department of Art regarding satisfaction of underclass requirements.

102 Minor Area of Study

A minor area of study consists of 18-24 hours of course work selected in consultation with the student's faculty advisor and including at least 6 hours of courses which are numbered "300" or above.

DEPARTMENTAL COURSE OFFERINGS:

I HISTORY OF ART (Course Prefix AH)

INTRODUCTION TO THE VISUAL ARTS

201 A study of the language of the visual arts emphasizing the visual methods that artists and architects have employed throughout history to express their thoughts, emotions, and reactions to life. Faudie, Plummer. 3sh. (Fall, Spring).

SURVEY OF ART

202 The origins and development of architecture, sculpture and painting are the main concerns of this study of the key monuments of western

art. Selected examples of Greek, Byzantine, Medieval, Renaissance and Modern art are studied as embodiments of the ever-changing cultural Weltanschauung. Panas, Weller. 3sh. (Fall, Spring).

AMERICAN ART FROM COLONIAL TIMES TO THE PRESENT

211 A survey of American painting, sculpture, architecture, and crafts from the early settlements to the 20th Century. Weller. 3sh. (Fall).

ART OF NON-EUROPEAN CULTURES

213 An investigation of primitive art and its relationship to contemporary art and life.

African, Oceanic and pre-Columbian art will be studied within the total cultural framework. Student understanding and involvement will be heightened by slides, movies, discussions and field trips. Weller. 3sh. (Fall, Spring).

TWENTIETH CENTURY ART

221 A survey of the development of painting architecture and sculpture from the late nineteenth century to the present. Major examples of both European and American artists and architects will be included. Weller. 3 sh. (Fall).

GREEK ART

312 A survey of Cycladic, Mycenaean, Archaic, Classical, and Hellenistic Art. Panas. 3 sh. (By demand).

ORIENTAL ART

314 A survey of the arts of India, China, Japan, and adjacent areas. 3 sh. Panas. (Spring, 1974).

BAROQUE ART

322 A study of 17th century European painting, sculpture, and architecture. Panas, Weller. 3 sh. (By demand).

HISTORY OF PHOTOGRAPHY AND FILM

331 A study of the development of photography through the past 140 years and its relation to various art movements. Selective survey of history of film. Faudie. 3 sh. (Fall, 1973).

II STUDIO AND LABORATORY COURSES

(Course Prefix SA)

DESIGN I

221 An integrated study of two and three-dimensional design principles and how they articulate structure, space and form. The development of visual ideas that relate to

painting, sculpture, graphic arts and architecture. Griffith, Pinardi, Plummer. 3 sh. (Fall, Spring).

DESIGN II

212 Advanced study of three-dimensional design principles and how they articulate structure, space, and form. Prerequisite: SA 211. Griffith. 3 sh. (Spring).

DRAWING I

221 A foundation course in experimental-techniques using a variety of media. Because drawing and its application to the realm of ideas is basic to every form of art, a wide range of assignments are made to develop expression on an individual basis. Pinardi, 3 sh. (Fall, Spring).

DRAWING II

222 A continuation of SA 221 with emphasis on the development of a personal statement through drawing. Pinardi. 3 sh. (Spring, 1973).

PHOTOGRAPHY I

241 An introduction to photography with an emphasis on photographic composition and pictorial elements. Basic darkroom techniques on black and white photography will be covered. Students learn to develop black and white film and to make black and white prints. Faudie. 3 sh. (Fall, 1972, 1973, Spring, 1973).

PHOTOGRAPHY II

242 Advanced black and white techniques and introduction to use and development of color. Faudie. 3 sh. (Spring, 1974).

JEWELRY I

271 A practical application of jewelry design, using copper enameling, wood and silver. Open to all students, but SA 211 recommended for preparation. Plummer. 3 sh. (Fall, 1972, 1973; Spring, 1973).

JEWELRY II

- 272 Advanced techniques in jewelry making. Plummer. 3 sh. (Spring, 1974).

PAINTING I

- 321 Oil painting and related media are taught as vehicles for serious creative expression. The student is encouraged to explore subjects, styles and techniques that are of interest to him. Instruction is directed to the individual needs of each student. Pinardi, Plummer. 3 sh. (Fall, Spring).

PAINTING II

- 322 Students showing a high proficiency in painting are given increased freedom to expand their creative expression. Prerequisite: SA 321. Plummer, Pinardi. 3 sh. (Spring).

ART AND THE CHILD

- 331 A lecture-studio course that analyzes the creative force in children and considers how such force can be directed toward a meaningful art expression. Panas. 3 sh. (Fall, Spring).

FILM-MAKING

- 323 Deals with the basic mechanics of film form, structure and grammar; how a movie is and can be made. Basic camera usage in Super 8 (sound and mixed media). Silent films and film history where relevant. Faudie. 3 sh. (Fall, Spring).

GRAPHICS I

- 351 An introduction to graphic techniques and expression. The approach is creative rather than directed, emphasizing experimentation and exploration in many areas of print-making. Griffith. 3 sh. (Fall, 1971, Spring, 1972).

GRAPHIC II

- 352 An introduction to the methods of lithography and etching. Emphasis is on design and printing techniques. Prerequisite: SA 351. Griffith. 3 sh. (Spring, 1973).

SCULPTURE

- 361 A course in three dimensional expression using a variety of sculptural materials which will develop an understanding of the concepts of space and form as applied to personal expression in the plastic arts. Pinardi. 3 sh. (Fall).

DESIGN PROBLEMS

- 411 Explores ways of learning through seeing by devising and analyzing two and three dimensional constructions. Purpose is to develop sensitivity and activity in a way which may benefit the learning process in all subject areas and the discovery of interdisciplinary relationships. Griffith. Panas. 3 sh. (By demand).

FABRIC DESIGN

- 415 Fundamental principles of color, line, and form are applied to excellence of design in clothing and accessories. Study of current trends of fashion, followed by experimental work in printing, dying, batik, and other techniques as applied to decorative design. Griffith. 3 sh. (Fall, Spring).

COMMERCIAL ILLUSTRATION

- 421 Basic techniques and styles of lettering and principles of commercial and story illustration. Griffith. 3 sh. (By demand).

WATERCOLOR

- 431 Aims to develop the student's ability to use transparent and opaque water-colors and related media in a fresh and direct manner. A variety of techniques are explored within the capabilities of each individual. Plummer. 3 sh. (Fall, Spring).

DIRECTED STUDIES IN ART

491 A special problem in such studio arts as design, drawing, painting, photography, and sculpture is investigated through conference and studio work. Prerequisite: demonstrated proficiency in area selected for directed studies and consent of instructor. 3 sh. (By arrangement).

ADVANCED TUTORIAL IN ART

492 A program of directed studies which affords the highly talented student with an additional

opportunity to pursue a previously explored problem in greater depth or to initiate an additional problem. Prerequisite: Demonstrated proficiency in area selected for directed studies and consent of instructor. 3 sh. (By arrangement).

Special reference is made to PH 284--Philosophies of Art and Beauty which may be credited to Art concentrations and minors.

BEHAVIORAL SCIENCES

Marc Rondeau, Acting Chairman
Department of Behavioral Sciences

Shirley Kolack, Director
Sociology Program

The Department of Behavioral Sciences offers major concentrations in Psychology and Sociology leading to Bachelor of Arts and Bachelor of Science degrees and supporting concentrations in Psychology and Sociology for students who can arrange such additional concentrations. The Department also offers minor areas of study in the Behavioral Sciences, Psychology, and Sociology.

Psychology Concentration

A concentration in Psychology should be of value to students interested in the study of human behavior and personality and is intended to augment a student's general liberal-arts education as well as to provide the basis for specialized professional training. The Psychology faculty regard their courses in general and the concentration in particular as "pre-professional" in the sense that training in psychology will prove useful to students planning graduate work and careers in mental health or special education fields, as well as in industrial psychology, social work, experimental research, and the teaching profession.

Concentrations in Psychology (both the major degree concentration and the supporting second concentration) consist of 30-45 hours of course work and must include the following:

1. PS 275--Experimental Psychology: Animal Learning or
PS 276--Experimental Psychology: Human Learning
2. PS 231--Psychology of Learning or
PS 281--Theories of Human Development
3. PS 209--Social Psychology or
PS 232--Theories of Personality
4. PS 272--Abnormal Psychology

Concentrators in Psychology must also take at least two courses in Psychology at the "400" level and must take MA 206--Elementary Statistical Analysis.

Students intending to pursue teaching careers at the elementary level may apply to the teacher-education program in Elementary Education at the end of the sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in the catalogue under the heading for Education. Students who anticipate application to the program in Elementary Education at the end of the sophomore year should consult the "Course of Study for Elementary Education and Psychology" and plan their programs accordingly.

Psychology concentrators may also petition for admission to the Secondary Education program in Behavioral Science Education at the end of their sophomore year. Depending upon the course work they have chosen, graduates of the program in Behavioral Science Education may find teaching positions in such areas of the behavioral sciences as sociology, psychology, anthropology, social problems, Black studies, women's studies, urban studies, group interaction, marriage and family living, and sex education. To insure that necessary prerequisite course work has been undertaken prior to specified application dates, students who plan to apply for the Secondary Education program in Behavioral Science Education should consult the "Academic Policies Concerning Teacher Education Programs" and the "Curriculum Requirements for Secondary Education Programs" which appear under the catalogue heading for Education. Psychology concentrators in Behavioral Science Education must present 18 semester hours in behavioral science areas exclusive of course offerings in Psychology and/ or in such other approved course work as is periodically determined by the Director of Behavioral Science Education. This requirement may be satisfied through course work which is also presented for General Education, unrestricted electives, minor areas of study, and Behavioral Science Foundations of Education. The following courses are recommended to Psychology concentrators for their general relevance to the teaching of behavioral sciences in the secondary school: SO 101--Introduction to Sociological Analysis and SO 201--Social Anthropology.

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Students transferring to the College and wishing to concentrate in Psychology must make individual arrangements with the Chairman of the Department regarding satisfaction of underclass requirements.

Sociology Concentration

A concentration in Sociology should be of value to students interested in the

study of society, whether they regard their college years as an opportunity to acquire a liberal-arts education with a broad understanding of the group determinants of behavior, social relations, and organizations; a preparation for useful and rewarding occupations upon graduation in governmental and voluntary agencies; or as pre-professional training to be continued in graduate school (not only in Sociology itself, but also for such diverse professions as law, social work, urban education, and business). Liberal program options make possible the combining of Sociology with other supporting studies for the purpose of meeting the career objectives of individual students. An especially attractive option is Sociology and Spanish for students who wish public service careers in urban agencies. Concentrations in Sociology (both the major degree concentration and the supporting second concentration) consist of 30-45 hours of course work and must include the following:

1. SO 101--Introduction to Sociological Analysis
2. SO 321--Contemporary Sociological Theories
3. SO 402--Research Methods in Sociology

In addition to the above courses, Sociology concentrators are urged to take MA 206--Elementary Statistical Analysis.

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Students intending to pursue teaching careers at the elementary or secondary level may apply to appropriate teacher-education programs at the end of the sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for Education. Students who anticipate application to the program in Elementary Education at the end of the sophomore year should consult the "Course of Study for Elementary Education and Sociology" and plan their programs accordingly. Sociology concentrators who plan to apply for the Secondary Education program in Social Science Education should consult the "Curriculum Requirements for Secondary Programs" and the Director of Social Science Education to insure that necessary prerequisite course work has been undertaken prior to the specified application dates. Sociology concentrators planning to take the teaching program in Social Science Education must complete 6 semester hours in each of three of the following four areas: Economics, Geography, History, and Political Science. This course work may be completed as part of the General Education requirements but at least 9 of the required 18 credits must be in courses on or above the "200" level.

Sociology concentrators may also petition for admission to the Secondary Education program in Behavioral Science Education. Depending upon the course work they have chosen, graduates of the program in Behavioral Science Education may find teaching positions in such areas of the behavioral sciences as sociology, psychology, anthropology, social problems, Black studies, women's studies, urban studies, group interaction, marriage and family living, and sex education. To insure that necessary prerequisite course work has been undertaken prior to specified application dates, students who plan to apply for the Secondary Education program in Behavioral Science Education should consult the "Curriculum Requirements for Secondary Education Programs" which appear under the catalogue heading for Education. Sociology concentrators in Behavioral Science Education must present 18 semester hours in behavioral science areas exclusive of course offerings in Sociology and/ or in such other approved course work as is periodically determined by the Director of Behavioral Science Education. This requirement may be satisfied through course work which is also presented for General Education, unrestricted electives, minor areas of study, and Behavioral Science Foundations of Education. The following courses are recommended to Sociology concentrators for their general relevance to the teaching of behavioral sciences in the secondary school: PS 101--General Psychology, PS 209--Social Psychology, and PS 272--Abnormal Psychology.

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Students transferring to the College and wishing to concentrate in Sociology must make individual arrangements with the Director of the Sociology Program regarding satisfaction of underclass requirements.

Minor Areas of Study

Minor areas of study consist of 18-24 hours of course work and are offered in Behavioral Sciences, Psychology, and Sociology. At least 6 hours must be taken in course work at the "300" level or above in fulfilling the requirements for each of these minor areas. Course work for the Behavioral Science Minor must include at least 9 hours from each of the two disciplines and must include PS 101--General Psychology and SO 101--Introduction to Sociological Analysis.

DEPARTMENTAL COURSE OFFERINGS:

attempt to achieve a better perspective on the process of human learning. 3sh. Scruggs. 3 sh. (Spring).

I. PSYCHOLOGY (Course Prefix PS)

GENERAL PSYCHOLOGY

101 A study of the dynamics of human behavior, including such factors as perception, emotion, motivation, personality, and social relations. 3 sh. (Fall, Spring).

CHILD GROWTH AND DEVELOPMENT

161 An examination of the major factors in the (261) development of children from birth to puberty. May not be taken for credit by students who have taken PS 163. 3 sh. (Fall, Spring).

ADOLESCENT DEVELOPMENT

162 The dynamics of behavior in adolescence. (262) Individual differences in development and performance are assessed in relation to physical, social, psychological and moral forces. May not be taken for credit by students who have taken PS 163. 3 sh. (Fall, Spring).

DEVELOPMENTAL PSYCHOLOGY

163 Research dealing with age-stage theories (263) from infancy through adolescence. Selected research in mature personality traits included. May not be taken for credit by students who have taken PS 161 or 162. 3 sh. (Fall, Spring).

SOCIAL PSYCHOLOGY

209 An introduction to such topics as attitude formation, decision-making, group processes of conformity, and leadership. Burke. 3 sh. (Fall, Spring).

PSYCHOLOGY OF LEARNING

231 Through analysis of the experimental study of the learning process, this course will

THEORIES OF PERSONALITY

232 A survey of the major theories that have been developed, including psychoanalytic theory, social learning theory and the various post-Freudian theorists: Sullivan, Horney, Rogers and Maslow. Rondeau, Hellstedt. 3 sh. (Fall, Spring).

ABNORMAL PSYCHOLOGY

272 An introduction to a study of various categories of neurotic, psychotic and character disorders. Psychotherapeutic techniques and other auxiliary professional methods to control and cure such disorders are studied. Rondeau, Hellstedt, Siegel, Seeman 3 sh. (Fall, Spring).

EXPERIMENTAL PSYCHOLOGY: ANIMAL LEARNING

275 An experimental analysis of the principles of (276) animal behavior and learning. The course will include both lecture and labs. Students will be expected to carry out at least two traditional experiments in addition to a research proposal of their own design. Prerequisite: MA 206--Elementary Statistical Analysis. Score. 3 sh. (Fall).

EXPERIMENTAL PSYCHOLOGY: HUMAN LEARNING

276 A laboratory investigation of selected problems in the area of human sensations and perception. Memory retention will also be examined. The course will include lecture and labs. Prerequisite: MA 206--Elementary Statistical Analysis. Score. 3 sh. (Spring).

THEORIES OF HUMAN DEVELOPMENT

281 A review of the major theories of development, including Freud, Piaget, Erikson, Sears and Sullivan. The course will

deal with development throughout the life cycle. Theory will be supplemented by individual case studies and research. Cannon. 3 sh. (Fall, Spring).

ORGANIZATIONAL PSYCHOLOGY

- 308 A study of social and psychological factors affecting employee-employer relations, personnel selection, organizational and consumer behavior. Prerequisite: PS 209 or 351. Norris. 3 sh. (Spring, 1973).

EXPERIMENTAL CHILD PSYCHOLOGY

- 312 An investigation of significant research in child development, including studies of infancy, intellectual performance, parent-child interaction, etc. Prerequisite: PS 281. Score. 3 sh. (Spring, 1974).

ANALYSIS OF INTERPERSONAL BEHAVIOR

- 328 Students in this course will form a self-(326) analytic group for the semester, using their experience in the group, plus readings, to come to a better understanding of human relationships. Score, Hellstedt. 3 sh. (Fall, Spring).

PSYCHOLOGY OF WOMEN

- 335 A course dealing with the psychological effects of sex on women and dealing with such topics as pre-marital sex, birth-control, pregnancy, abortion, and the effects of such factors as religion, economics, and social status. Burke. 3 sh. (By demand).

PSYCHOLOGICAL TESTS AND MEASUREMENTS

- 351 A survey of some major tests used to assess such factors as mental abilities, vocational interests, attitudes, objective and projective personality. Prerequisite: PS 101. Mancib. 3 sh.(Fall).

ASSESSMENT OF PERSONALITY

- 352 An introduction to techniques of clinical

evaluation, including the use of objective, projective, and self-report measures. The course will also employ case studies and other sources of data to analyze individual life histories. Prerequisite: PS 351. Mancib. 3 sh. (Spring).

INTERACTION THEORIES OF PERSONALITY

- 368 An investigation of recent theories of personality, emphasizing social interaction and communication. Special emphasis upon the theories of Sullivan, Leary, Goffman and Haley. Prerequisite: PS 209 or 232. Siegel. 3 sh.(Spring, 1974).

BEHAVIOR PROBLEMS OF CHILDHOOD

- 371 A study of the early parent-child relationship with a focus on the critical points at which disturbances in development can occur. Prerequisite: PS 281 or 272. Seeman. 3 sh. (Fall, 1973).

DREAMS, RELIGION, AND MYTHOLOGY

- 398 An examination of some of the creative processes in human civilization, based on the personality theories of Freud and others. The course will concentrate on the symbolic nature of these phenomena as expressions of universal human needs and problems. Prerequisite: PS 232. Siegel. 3 sh. (Fall, 1972).

TOPICS IN CHILD DEVELOPMENT

- 425 Each student will be required to carry out a significant study of child development. The course will treat such selected topics as moral development, visual preferences in infants, identification and imitation, etc. Prerequisite: PS 161, 163, or 281. Hellstedt, Burke. 3 sh. (Fall, 1973).

SEMINAR IN PERSONALITY THEORY AND RESEARCH

- 424 Special research topics, such as achievement, creativity, and anxiety will be

selected from current literature. Each student will carry out his own independent research. Prerequisite: PS 232. Hellstedt. 3 sh. (Spring, 1973).

TOPICS IN PSYCHOPATHOLOGY

428 Intensive coverage of specific topics such as retardation, autism, addiction, and schizophrenia. Each student will do some observation in a mental-health setting and carry out a review of existing literature in a specific problem area. Prerequisite: PS 272. Siegel. 3 sh. (Spring, 1974).

SEMINAR IN CLINICAL PSYCHOLOGY

431 Students in this seminar will participate as volunteers at the Solomon Mental Health Center, working with emotionally disturbed children and their families. The seminar will focus on some of the issues associated with clinical practice and community mental health. Prerequisite: PS 272 or 371. Seeman. 3 sh. (Fall, Spring).

SEMINAR IN COMPLEX HUMAN BEHAVIOR

433 A rigorous and systematic extension of learning principles to selected complex human behaviors, including an analysis of the development of language and mathematical language sequences, problem solving, and human motivation. In addition, students will be expected to participate actively in developing a behavioral conception of child development. Prerequisite: PS 161, 231, 232, 275, 276, or consent of instructor. Score. 3 sh. (Fall, 1973).

DIRECTED STUDIES IN PSYCHOLOGY

491 Through frequent consultation with the instructor, the student will investigate and define a problem of research, the results to be presented in a significant paper. Prerequisite: Permission of instructor. 3 sh. (By arrangement).

ADVANCED TUTORIAL IN PSYCHOLOGY

495 A program of directed studies which affords the advanced student with an additional opportunity to pursue a previously explored problem in greater depth or to initiate an additional problem. Prerequisite: Demonstrated proficiency in an area selected for directed studies and consent of instructor. 3 sh. (By arrangement).

Special reference is made to PH 353--Existence and Anxiety which may be credited to the Psychology concentration or minor.

II SOCIOLOGY (Course Prefix SO)

INTRODUCTION TO SOCIOLOGICAL ANALYSIS

101 A comparative study of group behavior which is basic to all societies. Attention is given to all major social institutions that comprise the social structure. Empirical studies of small, simple societies, as well as material from larger more complex societies, are utilized. 3 sh. (Fall, Spring).

SOCIOLOGY THROUGH LITERATURE

131 An investigation of the principles of sociology through the study of literary masterpieces and contemporary literature. 3 sh. (By demand).

SOCIAL ANTHROPOLOGY

201 Using the comparative approach to the study of society, this course will examine several distinct cultures as a means of understanding both the universal constants and the variations in human societies. 3 sh. (Fall, Spring).

CONTEMPORARY SOCIAL PROBLEMS

222 Drawing upon topical material and recent literature, this course will examine in depth a number of social problems in the United States, such as race relations and prejudice,

slums, crime and violence. 3 sh. (Fall, Spring).

THE FAMILY AND SOCIALIZATION

- 231 A study of the nature of family patterns and the process of socialization in the U.S. which attempts to understand the relationship of socialization to personality growth as well as to the demands of society. 3 sh. (Fall, 1972).

SOCIOLOGY OF WOMEN AND SEX ROLES

- 241 Drawing upon material from the social sciences, behavioral sciences, and literature, this course will examine the roles traditionally assigned to women, emphasizing the effects of role assignment on the status of women in contemporary American society. Attention will focus on socialization into sex roles, and on the impact of family, economic, and educational institutions on the life chances of women. 3 sh. (By demand).

CULTURE AND PERSONALITY

- 302 An examination of the hypothesis that variations in culture and society have distinct impact on the growth of personality patterns within the society. Prerequisite: SO 201. 3 sh. (Spring, 1974).

TRIBAL SOCIETIES

- 309 A study of the lives of primitive peoples and their social institutions with particular emphasis on the organic integrated character of life in structurally simple societies. 3 sh. (By demand).

AFRICAN CULTURES

- 312 The course will focus on the modern national states of the African continent to examine their social and political organization, Prerequisite: SO 201. 3 sh. (Spring, 1973).

SOCIAL STRUCTURE OF INDIA

- 315 An investigation into the structural units

which comprise the foundations of the Indian social system. Emphasis is placed on the family system, kinship structure, caste structure, the village community, and the processes which link these together. 3 sh. (By demand).

CONTEMPORARY SOCIOLOGICAL THEORIES

- 321 An examination of the major theories developed in recent years to provide a systematic method of understanding and defining the social process. Prerequisite: SO 101. 3 sh. (Fall, Spring).

INTRODUCTION TO SMALL GROUPS

- 331 An intensive analysis of interaction patterns in small group settings with emphasis upon role relationships and interpersonal relations within the classroom group. 3 sh. (Fall, 1972).

THE STUDY OF MINORITIES

- 334 This course will examine the process of immigration into the U.S. over the last century, with particular emphasis on the process of assimilation. Prerequisite: SO 101. 3 sh. (Spring).

THE BLACK EXPERIENCE IN AMERICAN LIFE

- 335 A careful examination of the role and status of the Black in this country since slavery. Prejudice, racism, and Black separatism will be emphasized. 3 sh. (Fall, 1972).

THE SOCIOLOGY OF DEVIANCE

- 338 This course will focus on the social factors influencing deviant behavior, violent crime, ghetto riots, and drug addiction. 3 sh. (Spring, 1973).

STRATIFICATION: CLASS STATUS, AND POWER

- 341 This course will focus on the phenomenon of class distinction, with particular reference to

social class in the U.S. The approach will be both historical and sociological. Prerequisite: SO 101. 3 sh. (Fall).

URBAN SOCIOLOGY

- 345 Drawing upon material from all the social sciences, this course will attempt to bring into sharper focus the dominant phenomenon of 20th century America, the rise of the megalopolis. Prerequisite: SO 101. 3 sh. (Fall).

COMMUNITY STUDIES

- 355 This course will involve students in a cooperative attempt to study the city of Lowell within a framework derived from a critical reading of classic American community studies. 3 sh. (By demand).

POLITICAL SOCIOLOGY

- 356 The social functions of politics and a study of the extent to which the social structures of society (classes, occupations, races, and levels of opportunity) qualify political activity. 3 sh. (Spring, 1973).

THE SOCIOLOGY OF RELIGION

- 357 Sociological analyses of contemporary and historical religious institutions and experiences. An analysis of religious leadership, church membership, and institutional change. 3 sh. (Fall, 1973).

POPULATION DYNAMICS AND SOCIAL CHANGE

- 362 Changes in size, composition, and distribution of populations, the demographic dynamics underlying them, and their social consequences with an exposition of census data and vital statistics, demographic rates, life tables, and cohort analysis. 3 sh. (Spring, 1973).

RESEARCH METHODS IN SOCIOLOGY

- 402 The techniques of survey-research and data-

collection, including participant observation, sociometry, construction of questionnaires, interviewing, methods of scaling and techniques of research design. Students will complete a research project, working either individually or as members of small teams. Prerequisite: SO 101. 3 sh. (Spring).

SEMINAR IN FAMILY AND KINSHIP

- 421 A study of the range of family and kinship structures in human societies with particular reference to the relationship of variation in structures to the process of socialization. 3 sh. (By demand).

SEMINAR IN SOCIETY, CULTURE AND PERSONALITY

- 422 An examination of cross-cultural theories as they relate to variations in culture and society having impact on the development of basic personality types in a society. Each student will examine in depth the interrelations of society, culture, and personality in one particular culture. 3 sh. (By demand).

SEMINAR: UTOPIAN COMMUNITIES

- 432 An exploration of present and past attempts (404) to achieve the good life through utopian communities. Attention will be given to applicable theories of social change in case study explorations of experimental utopian communities. 3 sh. (Spring, 1974).

CHARACTER AND PERSONALITY IN AMERICAN SOCIETY

- 441 An examination of the structure of American society with particular emphasis on the relationship of this structure to the American character structure or modal personality type, using such sources as De Tocqueville, Reisman, Meade, and Friedenberg. 3 sh. (By demand).

PRINCIPLES OF SOCIAL WORK

- 461 A study of the historical background and basic principles of public and private social

work, social welfare organization and practice in industrial society, with particular emphasis on the contemporary society of America. 3 sh. (Fall).

FIELD PLACEMENT

- 462 This course includes supervised placement in a professional setting with experience in professional problem-solving. 3 sh. (Spring).

SENIOR SEMINAR IN SOCIOLOGY

- 481 Students through regular meetings with instructor and other members of the class plan and make progress reports on individual research problems. Techniques of participant - observation and survey analysis will be utilized and methods of using secondary sources will be explored. 3 sh. (Fall).

DIRECTED STUDIES IN SOCIOLOGY

- 491 The student, through regular and frequent

consultation with his instructor, develops a course of directed readings in sociology and defines a problem for individual research. Prerequisite: Permission of instructor. 3 sh. (By arrangement).

ADVANCED TUTORIAL IN SOCIOLOGY

- 495 A program of directed studies which affords the advanced student with an additional opportunity to pursue a previously explored problem in greater depth or to initiate an additional problem. Prerequisite: Demonstrated proficiency in an area selected for directed studies and consent of instructor. 3 sh. (By arrangement).

Special reference is made to FE 326--Sociology of Education, which may be credited to the Sociology minor or concentration. Those concentrators admitted to teacher-education programs in Elementary Education and Social Science Education may not count FE 326 toward the Sociology concentration.



EDUCATION

Margaret R. Shannon, Chairman
Department of Education

The Department of Education offers a teacher-education program in Elementary Education to those students pursuing approved concentrations of the Bachelor of Arts and Bachelor of Science degrees who have satisfied the admission requirements prescribed by the "Academic Policies Concerning Teacher-Education Programs." Students must continue to pursue the academic concentrations in which they are enrolled at the time of their admission to the program in Elementary Education. The following academic concentrations may be undertaken by students who wish to apply to the Elementary Education program: American Studies, Art, English, Environmental Science, French, History, Mathematics, Philosophy, Political Science, Psychology, Sociology, and Spanish.

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Teaching programs in Secondary Education (Art Education, Behavioral Science Education, English Education, Language Education, Mathematics Education, Science Education, and Social Science Education) are administered respectively by the Departments of Art, Behavioral Science, English, Language, Mathematics, Science, and History and Political Science. The teaching program in Music Education is administered by the Department of Music. Programs of Secondary Education and Music Education are subject to the rules and regulations prescribed by the "Academic Policies Concerning Teacher-Education Programs."

COMMITTEE FOR TEACHER EDUCATION

M. Virginia Biggy, Director of Elementary-Education Apprentice Teaching
Robert Bousquet, Director of Language Education
Joyce Denning, Director of Social Science Education
Paul Gayzagian, Director of Music Education
Curtis Hinckley, Director of Science Education
William Malone, Director of Mathematics Education and Chairman,
Department of Mathematics
Mary McGauvran, Director of Admissions and Professor of Education
Leo Panas, Director of Art Education and Chairman, Department of
Art
Domenic Procopio, Dean of Graduate School
William Roberts, Director of English Education
Margaret Shannon, Chairman, Department of Education
Richard Sprague, Director, Model Cities Program in Elementary Education

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The Committee for Teacher Education is responsible for establishing basic policies for all teaching programs of the College and acts as an appeals body for all students enrolled in such programs or seeking admission to such programs. When reviewing or establishing basic policies for teaching programs, the Committee is augmented with student representation from the several teaching programs. All decisions of the Committee in reviewing student petitions are final.

ACADEMIC POLICIES CONCERNING TEACHER-EDUCATION PROGRAMS

Admission to baccalaureate study at Lowell State College does not guarantee admission to teacher-education programs in Elementary, Music, or Secondary Education. Students who wish to be considered for a teacher-education program must apply to the appropriate program director or department chairman in accordance with the regulations which are cited below.

Application for Admission to Teacher-Education Programs

1. The semester deadlines for filing an application for admission to a teacher-education program are May 1 and December 1.
2. A student anticipating completion by the end of a fall semester of the specified prerequisite courses for the teacher-education program to which he seeks admission should apply by December 1. A student anticipating completion by the end of a spring semester of the specified prerequisite courses for the teacher-education program to which he seeks admission should apply by May 1.

3. Students who fail to complete prerequisite course requirements as anticipated are automatically excluded from consideration but may reapply prior to that next deadline which is consistent with their anticipated completion of prerequisite requirements. Upon the recommendation of the Teacher-Education Committee, a student who has a deficiency in completing prerequisite course requirements which is clearly of a minor nature and who is recommended by his Director or the Chairman of the Education Department for consideration by the Committee may be authorized to initiate Foundations of Education course work prior to his admission to a teacher-education program.
4. A student who fails to satisfy specified prerequisite course work by the end of four semesters of full-time study (60 semester credits) may expect to extend his period of baccalaureate studies beyond the customary eight semesters when his acceptance to a teacher-education program has been delayed more than one semester.
5. Students admitted to the College as transfer students apply for teacher-education programs in accordance with the above application deadlines and on the basis of their anticipated completion of specified prerequisite course work.
6. Admission to teacher-education programs requires as minimum expectations the completion of specified prerequisite courses and the achievement of basic cumulative averages. Program quotas may not permit the admission of all students who satisfy basic admission standards when the number of applicants exceeds the ability of the teacher-education faculty to teach and supervise all applicants.
7. Application forms for admission to all teacher-education programs may be secured from the Office of the Registrar.

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Admission to Teacher-Education Programs

Admission to a teacher-education program is granted on the basis of "regular status" or "provisional status."

A. "Regular Status"

Applicants who meet the following requirements will be admitted to "regular status" in a teacher-education program:

1. Satisfactory completion of at least 60 semester hours of course work, including a minimum of 18 semester hours in one academic major (16 semester hours in Biology for Biology concentrators and 15 semester hours in Environmental Sciences for Environmental Science concentrators applying for the Science Education program and 40 semester hours in Music for Music majors applying for the Music Education program), and all courses required for the teacher-education program for which application is made;
2. A cumulative grade-point average of 2.40 or better for all course work taken in the College and in other accredited colleges or universities;

3. A cumulative grade-point average of 2.50 or better in one academic major computed on the minimum number of hours in one academic major as cited in paragraph 1, above.
4. Satisfactory evidence of effective English skills, with a grade of "C" or better in EN 101--English Composition.
5. Acceptable scores on the general examinations of the College Level Examination Program (CLEP) administered by the College during each spring semester to students with sophomore class status. Students admitted to the College with advanced standing must meet this requirement by taking the general examinations of CLEP during their first year of enrollment in the College.

B. "Provisional Status"

Within the limitations of program quotas, applicants who do not meet the requirements for admission to "regular status" may be admitted to a teacher-education program on "provisional status" when they meet the following requirements:

1. Satisfactory completion of at least 60 semester hours of course work, including a minimum of 18 semester hours in one academic major (16 semester hours in Biology for Biology concentrators and 15 semester hours in Environmental Sciences for Environmental Science concentrators applying to the program in Science Education and 40 semester hours in Music for Music majors applying to the program in Music Education) and all courses required for the teacher-education program for which they have made application;
2. A cumulative grade-point average of 2.30 or better for all course work taken in this College and in other accredited colleges or universities;
3. A cumulative grade-point average of 2.50 or better computed on the minimum number of hours in one academic major as cited in paragraph 1, above;
4. Satisfactory evidence of effective English skills; with a grade of "C" or better in EN 101--English Composition;
5. Acceptable scores on the general examinations of the College Level Examination Program (CLEP) administered by the College during each spring semester to students with sophomore class status. Students admitted to the College with advanced standing must meet this requirement by taking the general examinations of CLEP during their first year of enrollment in the College.

Notification of Admission

Applicants for admission to teacher-education programs will be notified in writing by the Committee for Teacher Education of their acceptance or rejection.

Students who applied by the May 1 deadline will be notified by July 1. Those who applied by December 1 will be notified by February 1. Applicants who are admitted will be informed whether their admission is to "regular status" or to "provisional status."

Continuance in Teacher-Education Programs

Students admitted to teacher-education programs will be evaluated at the end of each semester to determine their retention status. The Committee for Teacher Education will review the records of students in each program at the end of each semester upon receipt of student cumulative records from the Registrar. This review will be made in June and in January. Students will be notified in writing of their retention status on the basis of the following requirements.

1. Continuance in teacher education programs is granted only to students who meet the requirements for "regular status", i.e., a cumulative grade-point average of 2.40 or better for all course work taken in the College and in other accredited colleges and universities and a cumulative grade-point average of 2.50 in the academic concentration or specialization.
2. Students admitted to teacher-education programs with "provisional status" must achieve "regular status" by the end of the second semester immediately following their admission. Students on "provisional status" may not enroll in any course carrying the prefix designations of "EE," "ME," or "SE."
3. Students whose cumulative grade-point averages fall below 2.40 and / or whose grade-point averages in academic concentrations or specializations fall below 2.50 are ineligible for retention in teacher-education programs and accordingly are placed on "disqualified status." Such students may continue their enrollments in academic majors as long as they meet the retention requirements of their major departments and the College.*
4. Admission to courses in Curriculum and Instruction is granted only to those students who have achieved "regular status", who have passed each course of the required academic sequences, and who have passed with a grade of "C" or better each course of the required sequences for the Foundations of Education.

* A music student who is dropped from the Music-Education program and who wishes to apply to Musicology, Performance, or Theory programs of the Bachelor of Music degree must satisfy the professional admission requirements of such programs. Students who do not satisfy such requirements enter the Music concentration program which is offered under the regulations governing the Bachelor of Arts degree or they initiate studies in another concentration.

5. Students will not be admitted to courses in Apprentice Teaching who have not achieved a grade-point average of 2.50 or higher both in their major studies and in their course work in Education by the end of the period preceding the time established by the several teaching programs for Apprentice Teaching. Nor will students be admitted to Apprentice Teaching who have failed required courses in disciplinary concentrations or specializations unless such courses have been repeated and passed, who have not passed each course of the required Education sequences with a grade of "C" or better, and who have not evidenced within the clinical experiences of the Curriculum and Instruction courses those positive personal characteristics which are necessary to classroom effectiveness. Students who have failed to gain admission to Apprentice-Teaching courses have not satisfied the retention standards of the several teaching programs and must discontinue their enrollment in such programs.
6. No student may be placed in the public schools of the Commonwealth for Apprentice Teaching until he has presented medical evidence that he is free of tuberculosis. Nor may a student be placed for Apprentice Teaching in the public schools when he has exhibited personality characteristics unsuitable for the teaching of youth and adolescents as specified by the General Laws of the Commonwealth for the certification of teachers.
7. Senior students in teacher-education programs are required to present acceptable scores for the National Teacher Examination which is administered annually by the College during the spring semester (Cf. College Calendar).

Professional Course Evaluations

Curriculum and Instruction courses in Elementary Education and Music Education (EE 339, 341, 342, 343, 344, 345, 352, and 353; ME 391, 393, and 395) are graded on the standard letter system of the College. Curriculum and Instruction courses in Secondary Education (SE 381, 383, 385, 387, 389, 391, 393, 394, 395) and Apprentice Teaching courses (EE 441; ME 491, and 492; SE 481, 483, 485, 487, 489, 491, 493, 495) are graded on a "S" (satisfactory) or "U" (unsatisfactory) basis. A grade of "S" in Curriculum and Instruction courses in Secondary Education indicates that the quality of a student's work is "C" or better and merits admission to Apprentice Teaching courses. A grade of "S" in Apprentice Teaching courses indicates that a student's teaching performance merits an evaluation of "C" or better and warrants recommendation of the student for certification. Supportive evidence of each student's teaching performance is provided in his placement folder and is available for inspection by prospective employers. Although appropriate course credits are granted to students for courses in Curriculum and Instruction in Secondary Education or for courses in Apprentice Teaching when the grade of "S" has been assigned, these credits are not computed in cumulative averages.

Students who receive grades of "U" (unsatisfactory) in Curriculum and Instruction courses in Secondary Education or in Apprentice Teaching courses are automatically dropped from teaching programs.* Although a grade of "U" is entered on the student's permanent record card and indicates that attempted course credits have not been granted, this grade does not prejudice the student's academic standing in the College since such credits are not counted toward the grade-point average.

*A music student who is dropped from the Music-Education program and who wishes to apply to Musicology, Performance, or Theory programs of the Bachelor of Music degree must satisfy the professional admission requirements of such programs. Students who do not satisfy such requirements enter the Music concentration program which is offered under the regulations governing the Bachelor of Arts degree or they initiate another major concentration.

Withdrawal from Professional Courses

A student may withdraw from Curriculum and Instruction courses (course listings with "EE", "ME", and "SE" prefixes) without prejudicing his grade-point average at any time prior to the final week of classes for such courses. Withdrawal from Curriculum and Instruction courses is noted as "WS" (withdrawn-satisfactory) or "WU" (withdrawn-unsatisfactory).

A student who initiates an Apprentice Teaching course is expected to honor his commitment for the total apprenticeship period and is permitted to withdraw only for reasons of documented emergency or personal unsuitability for teaching. A student whose teaching performance has been satisfactory prior to withdrawing for reasons of emergency is permitted to withdraw with a grade of "WS." All other withdrawals from Apprentice Teaching are actions which are less than satisfactory and are noted on the permanent record card as "WU". Responsibility in carrying out the commitments of the teaching apprenticeship is fundamental to satisfactory standing in all Apprentice Teaching courses. Directors of teaching programs or of apprentice-teaching experiences may drop a student at any time with a grade of "WU" when he has evidenced a record of irresponsibility in carrying out apprenticeship commitments or when he has been absent from classes for more than two days of the apprenticeship period without a satisfactory documented excuse.

A student who withdraws from a Curriculum and Instruction course or who withdraws or is withdrawn from a course in Apprentice Teaching is automatically dropped from teaching programs. However, a student who has withdrawn from such courses with a satisfactory record ("WS") may petition the Committee for Teacher Education for reinstatement providing that he petitions the Committee prior to graduation. Reinstatement ordinarily requires a delay of graduation date and extension of the normal four-year period of undergraduate studies. A student who has withdrawn from Curriculum and Instruction or Apprentice Teaching courses with an unsatisfactory record ("WU") may not petition the Committee for Teacher Education for reinstatement.

Appeals Procedures

Applicants who do not qualify for admission to a teacher-education program and students who have been placed on "disqualified status" may submit a written petition to the Committee for Teacher Education for a review of their records and for permission to reapply. This petition must be received by the Committee no later than August 1 for students who filed their initial applications by May 1, or who were disqualified as of July 1, and no later than March 1 for students who filed their initial applications by December 1, or who were disqualified as of February 1. Students may not petition the Committee for reinstatement more than once. All decisions of the Committee in evaluating such petitions are final.

STUDENTS SUBJECT TO ACADEMIC POLICIES CONCERNING TEACHER-EDUCATION PROGRAMS IN EFFECT PRIOR TO FALL SEMESTER, 1972.

Regulations governing "Application for Admission to Teacher-Education Programs," "Notification of Admission," "Professional Course Evaluations," "Withdrawal from Professional Courses," and "Appeals Procedures" are in effect for all students.

Students transferring to the College and students readmitted to the College and applying to teacher-education programs are subject to the rules and regulations in effect for students with comparable class standing. All applicants to teaching programs after the spring semester, 1972, are required to present acceptable scores on the general examinations of the College Level Examination Program (CLEP) as part of their application credentials. All seniors in teacher-education programs are required to present acceptable scores on the National Teacher Examination which is annually administered by the College during the spring semester.

"Academic Policies Concerning Teacher-Education Programs" as cited on previous pages are applicable to students initiating course work at the College during the fall semester, 1972. Freshman students entering the College during the fall semester, 1971, are subject to the rules and regulations governing teacher-education programs which were in effect at the time of their admission and as cited in the regulations immediately below.

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As a prerequisite for application to teacher-education programs, all students must exhibit personality characteristics suitable for the teaching of youth and adolescents as specified by the General Laws of the Commonwealth for the certification of teachers, must have demonstrated satisfactory written and oral communication skills, and must have achieved cumulative grade-point averages of not less than 2.00 by the end of their sophomore year.

Application to the appropriate director of teaching programs (for Music and Secondary programs) or to the Chairman of the Education Department (for Elementary Education programs) must be made individually by each student in a letter of application. Such application should set forth the student's reasons for seeking admission to the specific teaching program, should include a summary of his experiences with youth and adolescents in community public or private organizations, and should specify any other pertinent information which may be useful to directors in evaluating his motivation and his commitment to teaching. Transfer students should indicate their intention of applying for teaching programs at the time of their application to the College.

Students who are acceptable to directors of teaching programs will be notified of their tentative admission into teaching programs prior to the beginning of the fall semester of their junior year. Transfer students desiring to enter teaching programs who have not made application by the time of their admission to the College and students who have not received tentative admission to teaching programs at the beginning of their junior year may petition the Committee for Teacher-Education Programs for reviews of their records and for consideration or

reconsideration of their letters of application. All decisions of the Committee in evaluating such petitions are final.

All teaching programs require specific academic course work and a professional studies sequence which include courses in the Foundations of Education, Curriculum and Instruction, and Apprentice Teaching. Specific course requirements for each of these sequences may be found in the descriptions of Elementary, Music, and Secondary programs which appear in the relevant subsections which follow. Statements concerning required academic course work for teaching programs may be found in the curricula descriptions of the relevant collegiate departments. Formal acceptance into teaching programs at the end of the semester preceding the period established by the several teaching programs for initiating course work in Curriculum and Instruction is granted only to those students who have achieved cumulative grade-point averages of 2.50 or higher in their major academic concentrations or specializations, who have earned cumulative grade-point averages of 2.00 or higher in their total courses of study, who have passed each course of the required academic sequences, and who have passed each course of the required sequences for the Foundations of Education with a grade of "C" or better.

Students will not be admitted to courses in Apprentice Teaching who have not achieved a grade-point average of 2.50 or higher both in their major studies and in their course work in Education by the end of the period preceding the time established by the several teaching programs for Apprentice Teaching. Nor will students be admitted to Apprentice Teaching who have failed required courses in disciplinary concentrations or specializations unless such courses have been repeated and passed, who have not passed each course of the required Education sequences with a grade of "C" or better, who have not evidenced within the clinical experiences of the Curriculum and Instruction courses those positive personal characteristics which are necessary to classroom effectiveness, or who have not obtained a 2.00 cumulative average by the end of the period immediately preceding the time established by the several teaching programs for Apprentice-Teaching courses. Students who have failed to gain admission to Apprentice-Teaching courses have not satisfied the retention standards of the several teaching programs and ordinarily must discontinue their enrollment in such programs.

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When there are extenuating circumstances, however, students who have been denied admission to apprentice teaching courses may petition the Committee for Teacher-Education for reviews of their records and for consideration of such mitigating conditions as they may wish to bring to the Committee's attention. After evaluation a student's petition, the Committee may recommend termination of enrollment in a teaching program or probationary enrollment status based upon a program of additional course work with specified achievement expectations. Students who fail or who withdraw from courses in Apprentice Teaching are automatically dropped from teaching programs and must apply for transfer to non-teaching programs of the College.

Courses in Apprentice Teaching ordinarily may not be repeated. However, students who have failed or who have withdrawn from Apprentice-Teaching courses and who have attained satisfactory grade-point averages to merit retention in the College may later apply to the Committee for Teacher-Education

for reinstatement. Such application is made with the understanding that no student may apply for completion of a teaching program after he has graduated and that reinstatement ordinarily requires postponement of graduation and extension of the normal four-year period of study. All decisions of the Committee concerning reinstatement are final. A passing evaluation in a repeated course in Apprentice Teaching cancels an original failing grade for purposes of determining a student's cumulative grade-point average.

EDUCATION ELECTIVES FOR GENERAL STUDENTS

Those courses listed under the catalogue heading "Foundations of Education" may be of interest to the general student as well as to the prospective teacher, and by vote of the Committee for Teacher Education such courses may be elected by any student. These courses may not satisfy the Uniform College Requirements for General Education but may be credited (with the approval of concerned departments) to related minor or major areas of study. Preference for admission to courses listed under the heading "Foundations of Education" is given to students who have been admitted to teacher-education programs and these courses may be restricted to such students when the occasion warrants.

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FOUNDATIONS OF EDUCATION (Course prefix FE)

PHILOSOPHY OF EDUCATION

- 301 The following matters will be considered in relationship to the processes and ends of education: the problem of self and social context, the structure of knowledge, and the structure of language and communication. Innis, Lyons. 3 sh. (Fall, Spring).

PHILOSOPHICAL AND MORAL ISSUES IN EDUCATION

- 302 Several important issues in education will be examined from the standpoint of moral and social philosophy. Topics will include the meaning and purpose of education, the concepts of equality, freedom, authority, and democracy in the school; and the problems of institutional accountability and reform. Readings will be selected from philosophers, educators and critics of education - past and present. Wagner. 3 sh. (Fall, Spring).

HISTORY OF AMERICAN EDUCATION

- 305 An analysis of the development of educational thought and practice in the United States within the context of American social, cultural, economic and intellectual history. Cunningham. 3 sh. (Fall, Spring).

MEASUREMENT AND EVALUATION

- 311 The following aspects of evaluation are studied: the construction of behavioral objectives, construction of achievement tests, calculation and interpretation of statistical techniques appropriate to testing, and analysis of selected standardized tests. D'Elia, McGauvran. 3 sh. (Fall, Spring).

EDUCATIONAL PSYCHOLOGY

- 322 Designed as an introduction to the study of human learning, this course covers such topics as efficiency in learning, testing, the psychology of teaching, and theories of human learning. Scruggs. 3 sh. (Spring).

SOCIOLOGY OF EDUCATION

326 The educational system is analyzed as an institution whose organizations and purposes reflect the socialization needs of the wider society. The school is studied as a social system and problems of authority, the role of the teacher, peer groups, aspirations and mobility of clientele are considered. Reciprocal relations of school and community are examined with reference to such factors as social class, family, and occupational systems. Special emphasis is placed on the issue of equality of educational opportunity and on recent organizational changes which attempt to meet this goal. Opportunities for field work are included as

an integral part of the course. Guttmacher. 3 sh. (Fall, Spring).

DYNAMICS OF INTERPERSONAL RELATIONS FOR TEACHERS

328 Provides the student with the opportunity as an active member to participate in training group ("T" Group) and other small group activities and exercises. These and supplementary activities enable the student to learn more about himself, group dynamics, and interpersonal relationships, and encourages him to extend his knowledge and skill and in working with individuals and groups. Hellstedt. 3sh. (Fall).

CURRICULUM REQUIREMENTS FOR MUSIC EDUCATION

A. Prerequisite Course Requirement

Students planning to apply for admission to the teacher-education program in Music Education must be making satisfactory progress at the time of application in those Music courses which have been specified for the Music Education program and must comply with the "Academic Policies Concerning Teacher Education." The Music Education program requires that PS 163--Developmental Psychology be satisfactorily completed prior to admission. This course work must be completed within the Behavioral and Social Sciences Distribution Area.

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B. Education Requirements

The Music Education program of the College requires a professional studies sequence which includes course work in the humanistic and behavioral science foundations of Education, curriculum and instruction, and apprentice teaching.

1. Humanistic Foundations of Education--One course selected from the following:

FE 301--Philosophy of Education (3 sh)

FE 302--Philosophical and Moral Issues in Education (3 sh)

FE 305--History of American Education (3 sh)

2. Behavioral Science Foundations of Education:

FE 328--Dynamics of Interpersonal Relations for Teachers (3 sh)

3. Curriculum and Instruction:

- ME 391--Music in the Elementary Schools (3 sh)
- ME 393--Music in the Secondary Schools (3 sh)
- ME 395--Curriculum Development and Evaluation in Music Education (4 sh)

4. Apprentice Teaching:

- ME 491--Apprentice Teaching of Music in the Elementary School (4 sh)
- ME 492--Apprentice Teaching of Music in the Secondary School (4 sh)

MUSIC EDUCATION (Course Prefix ME)

MUSIC IN THE ELEMENTARY SCHOOLS

- 391 Experience is given for the development of musical concepts by perception, analysis, and practice through the use of musical activities. Observations, demonstrations and actual school teaching is provided as an integral part of the course. Ashley. 3 sh. (Fall, Spring).

MUSIC IN THE SECONDARY SCHOOLS

- 128 393 Reviews the characteristics and attitudes of adolescence, and explores teacher attitudes as related to success in music teaching. Provides experience with a variety of approaches and activities appropriate to this level. Pordon. 3 sh. (Fall, Spring).

CURRICULUM DEVELOPMENT AND EVALUATION IN MUSIC EDUCATION

- 395 An exploration of music programs, grades K-12, as they presently exist and as they could be organized to fit special situations. Principles of evaluation are studied relative to their effectiveness in measuring aptitude and achievement in music classes. Gayzagian. 4 sh. (Fall, Spring).

APPRENTICE TEACHING OF MUSIC IN THE ELEMENTARY SCHOOL

- 491 Full-time apprentice teaching of music in public elementary schools under the supervision of qualified classroom teachers, administrators, music specialists, and members of the college faculty. Provides experience for the student in applying contemporary principles and techniques studied in music and music education courses, and in using a wide variety of materials and equipment. Prerequisite: ME 391. Ashley and Members of Music Department. 4 sh. (Fall, Spring).

APPRENTICE TEACHING OF MUSIC IN THE SECONDARY SCHOOL

- 492 Full-time apprentice teaching in public secondary schools under the supervision of qualified music specialists, administrators, and members of the college faculty. Provides experience for the student in applying contemporary principles and techniques studied in music and music education courses. Prerequisite: ME 393. Gayzagian and Members of Music Department. 4 sh. (Fall, Spring).

CURRICULUM REQUIREMENTS FOR SECONDARY EDUCATION

A. Prerequisite Course Requirements

Students planning to apply for admission to a teacher-education program in Secondary Education must be making satisfactory progress at the time of application in those concentrations which have been specified for the programs

to which they wish to apply, must comply with the "Academic Policies Concerning Teacher Education," and must have completed any specific academic course work beyond concentration areas which has been specified for particular Secondary Education programs. Statements concerning such course work appear in relevant sub-sections of concentration specifications which appear elsewhere in the catalogue under department headings. All Secondary Education programs require 3 semester hours of course work from among the following offerings of the Department of Behavioral Sciences:

PS 162--Adolescent Development
PS 163--Developmental Psychology

This course work may be completed within the Behavioral and Social Sciences Distribution Area or as part of a student's unrestricted course options.

B. Education Requirements

All Secondary Education programs of the College require a professional studies sequence which includes course work in the humanistic and behavioral science foundations of Education, curriculum and instruction, and apprentice teaching.

1. Humanistic Foundations of Education--One course selected from the following:

FE 301--Philosophy of Education (3 sh)
FE 302--Philosophical and Moral Issues in Education (3 sh)
FE 305--History of American Education (3 sh)

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2. Behavioral Science Foundations of Education:

FE 322--Educational Psychology (3 sh)
FE 326--Sociology of Education (3 sh)

3. Curriculum and Instruction--One course from the following listing- * which must be selected according to the student's subject matter concentration:

SE 381--Curriculum and Teaching of Art in the Secondary School (4 sh)
SE 383--Curriculum and Teaching of Science in the Secondary School (4 sh)
SE 385--Curriculum and Teaching of English in the Secondary School (4 sh)
SE 387--Curriculum and Teaching of Languages in the Secondary School (4 sh)
SE 389--Curriculum and Teaching of Social Sciences in the Secondary School (4 sh)
SE 391--Curriculum and Teaching of Mathematics in the Secondary School (4 sh)
SE 393--Curriculum and Teaching of the Behavioral Sciences in the Secondary School (4 sh)

* Language concentrators and bilingual students who wish to qualify for certification as secondary school teachers of transitional bilingual education must also take SE 394--Teaching of English as a Second Language and SE 395--Bilingual Education in the Secondary School.

4. Apprentice Teaching in the Secondary School - One course from the following listing which must be selected according to the student's subject-matter concentration.

SE 481--Apprentice Teaching of Art in the Secondary School (8 sh)
 SE 483--Apprentice Teaching of Science in the Secondary School (8 sh)
 SE 485--Apprentice Teaching of English in the Secondary School (8 sh)
 SE 487--Apprentice Teaching of Languages in the Secondary School (8 sh)
 SE 489--Apprentice Teaching of Social Sciences in the Secondary
 Secondary School (8 sh)
 SE 491--Apprentice Teaching of Mathematics in the Secondary School (8 sh)
 (8 sh)
 SE 493--Apprentice Teaching of the Behavioral Sciences in the Secondary
 School (8 sh)
 SE 495--Apprentice Teaching of Bilingual Classes in the Secondary
 School (8 sh)

* Language concentrators and bilingual students who wish to qualify for certification as secondary school teachers of transitional bilingual education take SE 495--Apprentice Teaching of Bilingual Classes in the Secondary School.

SECONDARY EDUCATION (Course Prefix SE)

THE CURRICULUM AND TEACHING OF ART IN THE SECONDARY SCHOOL

381 An analysis of the methods and materials currently used in the teaching of art with emphasis on recent trends in art teaching. Observation in the secondary schools is required. Panas. 4 sh. (Fall, 1974).

THE CURRICULUM AND TEACHING OF SCIENCE IN THE SECONDARY SCHOOL

383 An analysis of the methods and materials (381) currently used in teaching the sciences. Recent curriculum trends are emphasized. Observation in secondary schools is an integral part of the course. Hinckley. 4 sh. (Fall).

THE CURRICULUM AND TEACHING OF ENGLISH IN THE SECONDARY SCHOOL

385 Analysis of the pedagogical implications of (382) the kinds of knowledge imparted through the teaching of literature, composition, grammar, and linguistics in the high school. Special emphasis is given to problems

concerning individual ego-strength and the teaching role, and the concepts of method for levels of teaching. Introduction to teaching practice is provided through television micro-instruction with high school students. Observation in the secondary schools is required. Roberts. 4 sh. (Fall).

THE CURRICULUM AND TEACHING OF LANGUAGES IN THE SECONDARY SCHOOL

387 An analysis of the methods and materials (385) currently used in teaching foreign languages. Recent trends in the teaching of foreign languages in the secondary schools are considered, with particular reference to audio-lingual programs. Observation in secondary schools is required. Bousquet. 4 sh. (Fall).

THE CURRICULUM AND TEACHING OF SOCIAL SCIENCES IN THE SECONDARY SCHOOL

389 An analysis of the problems of content and (387) organization of the social sciences in both urban and suburban secondary schools. Attention is given to group processes, to varieties of instructional materials and methods (including directive and non-

directive inquiry methods), to the developing multimedia projects in the various areas of the social sciences, and to the specific problems of racial and ethnic minorities. Simulation and self-evaluation in the teaching role are emphasized. Prerequisite: Satisfactory completion of 6 semester hours in each of three of the following four areas (outside the major for History, Political Science, and Sociology concentrators): Economics, Geography, History, Political Science, and Sociology; and a formal observation program, carrying no credit, involving planned student visitation to secondary schools in the area. Denning. 4 sh. (Fall).

THE CURRICULUM AND TEACHING OF MATHEMATICS IN THE SECONDARY SCHOOL

- 391 Problems of classroom instruction as related to secondary mathematics with special emphasis upon essential features and new trends of the secondary mathematics curriculum. Observation in the secondary schools is required. Malone. 4 sh. (Fall).

THE CURRICULUM AND TEACHING OF THE BEHAVIORAL SCIENCES IN THE SECONDARY SCHOOL

- 393 An analysis of the methods and materials currently in use for the teaching of the behavioral sciences in the secondary school. Recent curriculum and organizational trends (including flexible instructional modules and team teaching) multimedia resources, lesson and curriculum planning, microteaching, and simulated classroom instruction experiences with secondary school students. Observation in a variety of schools is an integral part of the course. 4 sh. (Fall, 1974).

TEACHING OF ENGLISH AS A SECOND LANGUAGE

- 394 A course which presents a contrastive analysis of English and key target languages, followed by demonstration, discussion, and practical experience in the approaches,

methods, and techniques used in teaching English to speakers of other languages. For language concentrators and bilingual students who wish to qualify for certification as teachers of transitional bilingual education. Bousquet. 3 sh. (Spring).

BILINGUAL EDUCATION IN THE SECONDARY SCHOOL

- 395 An analysis of the approaches, techniques, and materials used in secondary school bilingual classes. Includes readings, discussions, and observation of language saturation programs, and advanced bilingual classes at the secondary level. Required for certification in secondary school transitional bilingual education. Prerequisite: SE 394. Bousequet. 3 sh. (Fall).

APPRENTICE TEACHING OF ART IN THE SECONDARY SCHOOL

- 481 Full-time apprentice teaching in public schools (suburban and urban) under the supervision of qualified art teachers, principals, and members of the art staff. Provides experience for the student in applying and extending his knowledge and ability in teaching Art as well as opportunity to participate in the total school program. Prerequisite: SE 381. Panas and art staff. 8 sh. (Fall, 1974).

APPRENTICE TEACHING OF SCIENCE THE SECONDARY SCHOOL

- 483 Full-time apprentice teaching in public schools (urban and suburban) under the supervision of qualified teachers, principals, and members of the science staff. Provides experience for the student in applying and extending his knowledge and ability in teaching science as well as opportunity to participate in the total school program. Prerequisite: SE 383. Hinckley and science staff. 8 sh. (Fall).

APPRENTICE TEACHING OF ENGLISH IN THE SECONDARY SCHOOL

- 485 Full-time apprentice teaching in public

schools (urban and suburban) under the supervision of qualified teachers, principals, and members of the English staff. Provides experience for the student in applying and extending his knowledge and ability in teaching English as well as opportunity to participate in the total school program. Prerequisite: SE 385. Roberts and English staff. 4 sh. (Fall).

APPRENTICE TEACHING OF LANGUAGES IN THE SECONDARY SCHOOL

487 Full-time apprentice teaching in public schools (urban and suburban) under the supervision of qualified teachers, principals, and members of the language staff. Provides experience for the student in applying and extending his knowledge and ability in teaching foreign languages as well as opportunity to participate in the total school program. Prerequisite: SE 387. Bousquet and language staff. 8 sh. (Fall).

APPRENTICE TEACHING OF SOCIAL SCIENCES IN THE SECONDARY SCHOOL

489 Full-time apprentice teaching in public schools (urban and suburban) under the supervision of qualified teachers, principals, and of members of the History and Political Science Department. Provides experience for the student in applying and extending his knowledge and ability in teaching social studies as well as opportunity to participate in the total school program. Prerequisite: SE 389. Denning and Members of the Department of History and Political Science. 8 sh. (Fall).

APPRENTICE TEACHING OF MATHEMATICS IN THE SECONDARY SCHOOL

491 Full-time apprentice teaching in public

schools (urban and suburban) under the supervision of qualified teachers, principals, and members of the mathematics staff. Provides experience for the student in applying and extending his knowledge and ability in teaching mathematics as well as opportunity to participate in the total school program. Prerequisite: SE 391. Malone and mathematics staff. 8 sh. (Fall).

APPRENTICE TEACHING OF THE BEHAVIORAL SCIENCES IN THE SECONDARY SCHOOL

493 Full-time apprentice teaching in the public schools (urban and suburban) under the supervision of qualified teachers, principals, and members of the Behavioral Science Department. Provides experience for the student in applying and extending his knowledge and abilities in teaching the behavioral sciences as well as opportunity to participate in the total school program. 8 sh. (Fall, 1974).

APPRENTICE TEACHING OF BILINGUAL CLASSES IN THE SECONDARY SCHOOL

495 Bilingual students and language concentrators who wish to qualify for certification as teachers of bilingual education receive supervised apprentice teaching experience in approved bilingual education classes in the public secondary schools under the supervision of qualified teachers, principals, and members of the secondary education staff. Provides experience for the student in applying and extending his knowledge and ability in teaching his subject concentration to secondary school students whose native languages are not English. Prerequisite: SE 394, 395. Bousquet and secondary education staff. 8 sh. (Fall).

CURRICULUM REQUIREMENTS FOR ELEMENTARY EDUCATION

A. Prerequisite Course Requirements

Students planning to apply for admission to the teacher-education program in Elementary Education must be making satisfactory progress at the time of

application in any one of the following academic concentrations:

American Studies, Art, Environmental Science, English, French, History, Mathematics, Philosophy, Political Science, Psychology, Sociology, or Spanish. Admission to the teacher-education program in Elementary Education is subject to the College regulations governing admission to teacher-education programs. In addition to these requirements, students applying to the program in Elementary Education must complete as part of their academic requirements and/or course work for the Uniform College Requirements the following prerequisite courses:

1. Courses in two laboratory science areas (9 sh)
2. Courses in mathematics selected from the MA 103-107 sequence or as otherwise specified by courses of study for "Elementary Education and Environmental Science" and for "Elementary Education and Psychology" (6 sh)
3. American history (6 sh)
4. PS 161-Child Growth and Development or
PS 163-Development Psychology (3 sh)

* Students entering the College prior to September, 1972, are required to present 12 sh of courses in two laboratory science areas.

B. Education Requirements

The Elementary Education program requires a professional studies sequence which includes course work in the humanistic and behavioral science foundations of Education, curriculum and instruction, and apprentice teaching.

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1. Humanistic Foundations of Education--One course selected from the following:

FE 301--Philosophy of Education (3 sh)
FE 302--Philosophical and Moral Issues in Education (3 sh)
FE 304--History of American Education (3 sh)

2. Behavioral Science Foundations of Education--each of the following courses:

FE 311--Measurement and Evaluation (3 sh)
FE 326--Sociology of Education (3 sh)

3. Curriculum and Instruction--The following courses as specified by policies of the Department of Education:

EE 339--Analysis of Teaching (3 sh)
EE 341--Reading: Elementary School (3 sh)
EE 342--Language and Literature: Elementary School (3 sh)*
EE 343--Mathematics: Elementary School (3 sh)
EE 344--Humanities and Social Studies: Elementary School (2 sh)
EE 345--Science: Elementary School (2 sh)

* Language concentrators and bilingual students who wish to qualify for certification as elementary school teachers of transitional bilingual education

take EE 352--Teaching of English as a Second Language (3 sh) and EE 353--Bilingual Education in the Elementary School (3 sh) in lieu of EE 342--Language and Literature: Elementary School.

COURSE OF STUDY FOR ELEMENTARY EDUCATION AND AMERICAN STUDIES

(Bachelor of Arts or Bachelor of Science)

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education, the applicant with a major concentration in American Studies must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also meet the following requirements:

1. Completion of 39 s.h. of the Uniform College Requirements, including the following:
 - a. Laboratory Science-9 s.h. of courses in no less than two science areas *;
 - b. Mathematics - 6 s.h. selected from MA 103-107;
 - c. HI 111-112--U.S. History+
 - d. Psychology - 3 s.h. selected from PS 161 or PS 163.

*Students who entered the College prior to fall semester, 1972, are required to complete 12 s.h. of courses.

+HI 111-112 is a prerequisite for the concentration in American Studies

2. Completion of 18 s.h. in the major concentration in American Studies, including 12 s.h. from the required course listing.
3. Completion of no less than 60 s.h. of course work: 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in American Studies

The concentration in American Studies requires 36 semester hours of course work and must include the following:

1. Required Courses (18 s.h.):

EN 241-242--History of American Literature

HI 246--Afro-American History, or

SO 334--The Study of Minorities *, or

SO 345--Urban Sociology *

HI 305--American Intellectual History to 1890, or

HI 306--American Intellectual History since 1890, or

PH 352--Topics in American Philosophy

EN 311 or HI 311--Seminar in American Studies

EN 411 or HI 411--Seminar in American Studies

*Prerequisite: SO 101--Introduction to Sociological Analysis

2. Elective Courses (18 s.h.):

a. Humanities Emphasis (Bachelor of Arts)

Courses totalling 18 s.h. elected from the Art, English, Music, and Philosophy areas of the "Authorized American Studies Electives".

b. Social Science Emphasis (Bachelor of Science)

Courses totalling 18 s.h. elected from the Economics, Geography, History, Political Science, and Sociology areas of the "Authorized American Studies Electives".

C. Elementary Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Following admission to the program in Elementary Education, students majoring in American Studies pursue a particular course sequence both in American Studies and in Elementary Education in the junior and senior years.

Sequence I

Fall Semester, Junior Year:

American Studies courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

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Spring Semester, Junior Year:

American Studies courses - 6 sh.*

Curriculum and Instruction courses - 9 s.h.

Fall semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

American Studies courses - 6 s.h.

Elective courses - 9 s.h.

Sequence II

Fall Semester, Junior Year:

American Studies courses - 9 s.h.

Elective courses - 6 s.h.

Spring Semester, Junior Year:

American Studies courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Fall Semester, Senior Year:

American Studies courses - 3 s.h.

Curriculum and Instruction courses - 9 s.h.

Elective course - 3 s.h.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

COURSE OF STUDY FOR ELEMENTARY EDUCATION AND ART
(Bachelor of Arts)

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education the applicant with a major concentration in Art must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also meet the following requirements:

1. Completion of 39 s.h. of the Uniform College Requirements including the following: a. Laboratory Science - 9 s.h. of courses in no less than two science areas* ; b. Mathematics - 6 s.h. selected from MA 103-107; c. American History - 6 s.h.; d. Psychology - 3 s.h. selected from PS 161 or PS 163.

* Students who entered the College prior to fall semester, 1972, are required to complete 12 s.h. of courses.

2. Completion of 18 s.h. in the major concentration in Art from the required course listing.
3. Completion of no less than 60 s.h. of course work; 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in Art

The concentration in Art requires 33 semester hours of course work and must include the following:

1. Required Courses (30 s.h.):
 - a. Each of the following courses:
 - AH 201--Introduction to the Visual Arts
 - SA 211--Design I
 - SA 221--Drawing I
 - SA 241--Photography
 - SA 321--Painting I
 - SA 331--Art and the Child (Junior or Senior Year)
 - SA 351--Graphics I

- b. Three of the following courses:
AH 202--Survey of Art
AH 211--American Art
AH 213--Art of Non-European Cultures
AH 221--20th Century Art
AH 322--Baroque Art

2. Elective course (3 s.h.): One course selected from the course offerings of the Department of Art.

C. Elementary Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Following admission to the program in Elementary Education, students majoring in Art pursue a particular course sequence both in Art and in Elementary Education in the junior and senior years.

Sequence I

Fall Semester, Junior Year:

Art courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Spring Semester, Junior Year:

Art courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Fall Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

Art Course - 3 s.h.

Elective courses - 12 s.h.

Sequence II

Fall Semester, Junior Year:

Art courses - 6 s.h.

Elective courses - 9 s.h.

Spring Semester, Junior Year:

Art courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Fall Semester, Senior Year:

Art course - 3 s.h.

Elective course - 3 s.h.

Curriculum and Instruction courses - 9 s.h.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

COURSE OF STUDY FOR ELEMENTARY EDUCATION AND ENGLISH (Bachelor of Arts)

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education, the applicant with a major concentration in English must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also, meet the following requirements:

1. Completion of 39 s.h. of the Uniform College Requirements including the following: a. Laboratory Science - 9 s.h. of courses in no less than two science areas* ; b. Mathematics - 6 s.h. selected from MA 103-107; c. American History - 6 s.h.; d. Psychology - 3 s.h. selected from PS 161 or PS 163.

*Students who entered the College prior to fall semester, 1972, are required to complete 12 s.h. of courses.

2. Completion of 18 s.h. in the major concentration in English from the required course listing.
3. Completion of no less than 60 s.h. of course work; 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in English

The concentration in English requires 36 semester hours of course work and must include the following:

1. Required Courses (27 s.h.):

EN 132--Types of Literature
EN 141--Great Books of Antiquity
EN 223--History and Development of the English Language
EN 224--Analysis of Modern English or EN 302--Expository Analysis
EN 231-232--History of English Literature
EN 241-242--History of American Literature
EN 423--Shakespeare I

2. Elective Courses (9 s.h.):

Three courses selected from the course offerings of the Department of English. The Department recommends that concentrators take one course in English literature between 1660-1900, one course in modern English literature, and one course in American literature in addition to the required courses.

C. Elementary Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Following admission to the program in Elementary Education, students majoring in English pursue a particular course sequence both in English and in Elementary Education in the junior and senior years.

Sequence I

Fall Semester, Junior Year:

English courses - 6 s.h., including EN 423.

Foundations of Education courses * - 9 s.h.

*Prerequisites for Curriculum and Instruction courses.

Spring Semester, Junior Year:

English Courses - 6 s.h., including EN 224 or EN 302.

Curriculum and Instruction courses - 9 s.h.

Fall Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

English courses - 6 s.h.

Elective courses - 9 s.h.

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Sequence II

Fall Semester, Junior Year:

English courses - 9 s.h., including EN 423.

Elective courses - 6 s.h.

Spring Semester, Junior Year:

English courses - 6 s.h., including EN 224 or EN 302.

Foundations of Education courses * - 9 s.h.

*Prerequisites for Curriculum and Instruction courses.

Fall Semester, Senior Year:

English courses - 3 s.h.

Elective courses - 3 s.h.

Curriculum and Instruction courses - 9 s.h.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

COURSE OF STUDY FOR ELEMENTARY EDUCATION AND ENVIRONMENTAL SCIENCE (Bachelor of Science)

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education, the applicant with a major concentration in Environmental Science must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also meet the following requirements:

1. Completion of 39-41 s.h. of the Uniform College Requirements including the following: a. Laboratory Science - 6-8 s.h. of PY 103-104 201-202; b. Mathematics - 6 s.h. of MA 107 and MA 201 or MA 206; c. American History - 6 s.h.; d. Psychology - 3 s.h. selected from PS 161 or PS 163.
2. Completion of 15 s.h. in the major concentration in Environmental Science from the required course listing.
3. Completion of no less than 60 s.h. of course work; 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in Environmental Science

The concentration in Environmental Science requires 33-34 semester hours of course work and must include the following:

1. Required Courses (30 s.h.):

ES 101--Introduction to the Environmental Sciences
GL 201-202--General Geology
GL 313-314--Environmental Geology
BI 311--Principles of Ecology
BI 412--Human Ecology
GL 303--Oceanography or BI 215--Aquatic Biology
PY 332--Meteorology
ES 301-302--Environmental Science Practicum

2. Elective Course (3-4 s.h.):

One course selected from the following Environmental Science electives: BI 214, BI 215, BI 231, BI 419, CH 225, GL 301, GL 302, GL 303, GL 308, GL 401, PY 215, PY 216.

C. Elementary Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Following admission to the program in Elementary Education, students majoring in Environmental Science pursue a particular course sequence both in Environmental Science and in Elementary Education in the junior and senior years.

Sequence I

Fall Semester, Junior Year:

Environmental Science courses - 8 s.h.: BI 311; GL 303 or BI 215; ES 301.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Spring Semester, Junior Year:

Environmental Science courses - 7 s.h.: BI 412; PY 332; ES 302.

Curriculum and Instruction courses - 9 s.h.

Fall Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

Environmental Science elective - 3-4 s.h.

Elective courses - 9 s.h.

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Sequence II

Fall Semester, Junior Year:

Environmental Science courses - 8 s.h.: BI 311; GL 303 or BI 215; ES 301.

Elective courses - 6 s.h.

Spring Semester, Junior Year:

Environmental Science courses - 7 s.h.: BI 412; PY 332; ES 302.

Foundations of Education courses * - 9 s.h.

* Prerequisite for Curriculum and Instruction courses.

Fall Semester, Senior Year:

Environmental Science Elective - 3-4 s.h.

Elective course - 3 s.h.

Curriculum and Instruction courses - 9 s.h.: EE 341; EE 342; EE 343.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

**COURSE OF STUDY FOR ELEMENTARY EDUCATION AND FRENCH
(Bachelor of Arts)**

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education, the applicant with a major concentration in French must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also meet the following requirements:

1. Completion of 39 s.h. of the Uniform College Requirements including the following: a. Laboratory Science - 9 s.h. of courses in no less than two science areas * ; b. Mathematics - 6 s.h. selected from MA 103-107; c. American History - 6 s.h.; d. Psychology - 3 s.h. selected from PS 161 or PS 163.

* Students who entered the College prior to fall semester, 1972, are required to complete 12 s.h. of courses.

2. Completion of 18 s.h. in the major concentration in French from the required course listing.
3. Completion or no less than 60 s.h. of course work; 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in French

The concentration in French requires 37 semester hours of course work and must include the following:

1. Required Courses (31 s.h.):

FR 241-242--Intensive French
FR 251-252--Advanced French Conversation
FR 321-322--Cultural Background and Survey of French Literature
FR 351-352--Advanced French Composition
FR 372--Applied Linguistics
FR 397 or 398--Language Laboratory Practicum
FR 491--Directed Studies in French Literature

2. Elective Courses (6 s.h.):

Two courses selected from the course offerings at the "400" level in French literature.

C. Elementary Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Students seeking certification as teachers of transitional bilingual education must present 36 semester hours of course work in Education. Following admission to the program in Elementary Education, students majoring in French pursue a particular course sequence both in French and in Elementary Education in the junior and senior years.

Sequence I

Fall Semester, Junior Year:

French courses - 7 s.h.

Foundations of Education courses* - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Spring Semester, Junior Year:

French courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Fall Semester, Senior Year:

Curriculum and Instruction courses - 7-10 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

French courses - 6 s.h.

Elective courses - 9 s.h.

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Sequence II

Fall Semester, Junior Year:

French courses - 7 s.h.

Elective courses - 9 s.h.

Spring Semester, Junior Year:

French courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Fall Semester, Senior Year:

French courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

COURSE OF STUDY FOR ELEMENTARY EDUCATION AND HISTORY (Bachelor of Science)

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education, the applicant with a major concentration in History must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also meet the following requirements:

1. Completion of 39 s.h. of the Uniform College Requirements including the following: a. Laboratory Science - 9 s.h. of courses in no less than two science areas* ; b. Mathematics - 6 s.h. selected from MA 103-107; c. Psychology - 3 s.h. selected from PS 161 or PS 163.

*Students who entered the College prior to fall semester, 1972, are required to complete 12 s.h. of courses.

2. Completion of 18 s.h. in the major concentration in History, including 9 s.h. from the required course listing.
3. Completion of no less than 60 s.h. of course work; 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in History

The concentration in History requires 36 semester hours of course work and must include the following:

1. Required Courses (12 s.h.):

HI 105--European History to 1715

HI 106--European History since 1715

HI 296--Introduction to Historical Study

HI 432--Research Seminar in History

2. Elective Courses (24 s.h.):

Two courses on or above the "200" level in American History;

Two courses on or above the "200" level in European History;

Two additional courses in American History or in European History;

One course in the Third World;

One course selected from the course offerings in History.

C. Elementary Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Following admission to the program in Elementary Education, students majoring in History pursue a particular course sequence both in History and in Elementary Education in the junior and senior years.

Sequence I

Fall Semester, Junior Year:

History courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Spring Semester, Junior Year:

History courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Fall Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

History courses - 6 s.h.

Elective courses - 9 s.h.

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Sequence II

Fall Semester, Junior Year:

History courses - 9 s.h.

Elective courses - 6 s.h.

Spring Semester, Junior Year:

History courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Fall Semester, Senior Year:

History courses - 3 s.h.

Elective courses - 3 s.h.

Curriculum and Instruction courses - 9 s.h.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

COURSE OF STUDY FOR ELEMENTARY EDUCATION AND MATHEMATICS (Bachelor of Science)

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education, the applicant with a major concentration in Mathematics must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also meet the following requirements:

1. Completion of 39 s.h. of the Uniform College Requirements including the following: a. Laboratory Science - 9 s.h. of courses in no less than two science areas *; b. American History - 6 s.h.; c. Psychology - 3 s.h. selected from PS 161 or PS 163.

*Students who entered the College prior to fall semester, 1972, are required to complete 12 s.h. of courses.

2. Completion of 18 s.h. in the major concentration in Mathematics from the required course listing.
3. Completion of no less than 60 s.h. of course work; 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in Mathematics

The concentration in Mathematics requires 33 semester hours of course work and must include the following:

1. Required Courses (24 s.h.)

MA 107--Introduction to Calculus
MA 201--Calculus I
MA 212--Set Theory and Logic
MA 202--Calculus II
MA 213--Modern Algebra
MA 214--Linear Algebra
MA 303--Calculus III
MA 304--Calculus IV

2. Elective Courses (9 s.h.)

Three courses, two of which must be at the "300" level or above, selected from the course offerings of the Department of Mathematics.

C. Elementary Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Following admission to the program in Elementary Education, students majoring in Mathematics pursue a particular course sequence both in mathematics and in Elementary Education in the junior and senior years.

Sequence I

Fall Semester, Junior Year:

Mathematics courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Spring Semester, Junior Year:

Mathematics courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Fall Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

Mathematics course - 3 s.h.

Elective courses - 12 s.h.

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Sequence II

Fall Semester, Junior Year:

Mathematics courses - 6 s.h.

Elective courses - 9 s.h.

Spring Semester, Junior Year:

Mathematics courses - 6 s.h.

Foundations of Education courses— - 9 s.h.

* Prerequisite for Curriculum and Instruction courses.

Fall Semester, Senior Year:

Mathematics course - 3 s.h.

Elective course - 3 s.h.

Curriculum and Instruction courses - 9 s.h.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice teaching: Elementary - 8 s.h.

**COURSE OF STUDY FOR ELEMENTARY EDUCATION AND
PHILOSOPHY (Bachelor of Arts)**

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education, the applicant with a major concentration in Philosophy must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also meet the following requirements:

1. Completion of 39 s.h. of the Uniform College Requirements including the following: a. Laboratory Science - 9 s.h. of courses in no less than two science areas* ; b. Mathematics - 6 s.h. selected from MA 103-107; c. American History - 6 s.h.; d. Psychology - 3 s.h. selected from PS 161 or PS 163.

*Students who entered the College prior to fall semester, 1972, are required to complete 12 s.h. of courses.

2. Completion of 18 s.h. in the major concentration in Philosophy.
3. Completion of no less than 60 s.h. of course work; 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in Philosophy

The concentration in Philosophy requires 30 semester hours of course work and must include the following:

1. Recommended Courses (18 s.h.):

PH 202--Logic I, or PH 307-- Philosophy of Language

One course from the History of Philosophy sequence ("250" courses)

Two courses from the topical sequence ("300" courses)

Two courses from the types of philosophy sequence ("350" courses)

2. Elective Courses (12 s.h.):

Four courses selected from the course offerings in Philosophy.

C. Elementary Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Following admission to the program in Elementary Education, students majoring in Philosophy pursue a particular course sequence both in Philosophy and in Elementary Education in the junior and senior year.

Sequence I

Fall Semester, Junior Year:

Philosophy courses - 6 s.h.

Foundations of Education courses* - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Spring Semester, Junior Year:

Philosophy courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Fall Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

Elective courses - 15 s.h.

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Sequence II

Fall Semester, Junior Year:

Philosophy courses - 6 s.h.

Elective courses - 9 s.h.

Spring Semester, Junior Year:

Philosophy courses - 6 s.h.

Foundations of Education courses* - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Fall Semester, Senior Year:

Elective courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

**COURSE OF STUDY FOR ELEMENTARY EDUCATION AND
POLITICAL SCIENCE (Bachelor of Science)**

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education, the applicant with a major in Political Science must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also meet the following requirements:

1. Completion of 39 s.h. of the Uniform College Requirements including the following: a. Laboratory Science - 9 s.h. of courses in no less than two science areas* ; b. Mathematics - 6 s.h. selected from MA 103-107; c. American History - 6 s.h.; d. Psychology - 3 s.h. selected from PS 161 or PS 163.

* Students who entered the College prior to fall semester, 1972, are required to complete 12 s.h. of courses.

2. Completion of 18 s.h. in the major concentration in Political Science, including 12 s.h. from the required course listing.
3. Completion of no less than 60 s.h. of course work; 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in Political Science

The concentration in Political Science requires 33 semester hours of course work and must include the following:

1. Required Courses (18 s.h.):

PO 101--Introduction to Political Science

PO 432--Research Seminar in Politics

One course in American Politics (on or above the "200" level)

One course in Comparative Politics (on or above the "200" level)

One course in International Relations (on or above the "200" level)

One course in Political Theory (on or above the "200" level)

2. Elective Courses (15 s.h.):

Five courses selected from the course offerings in Political Science.

C. Elementary-Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Following admission to the program in Elementary Education, students majoring in Political Science pursue a particular course sequence both in Political Science and in Elementary Education in the junior and senior years.

Sequence I

Fall Semester, Junior Year:

Political Science courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Spring Semester, Junior Year:

Political Science courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Fall Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

Political Science course - 3 s.h.

Elective courses - 12 s.h.

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Sequence II

Fall Semester, Junior Year:

Political Science courses - 6 s.h.

Elective courses - 9 s.h.

Spring Semester, Junior Year:

Political Science courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Fall Semester, Senior Year:

Political Science course - 3 s.h.

Elective course - 3 s.h.

Curriculum and Instruction courses - 9 s.h.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

COURSE OF STUDY FOR ELEMENTARY EDUCATION AND PSYCHOLOGY (Bachelor of Science)

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education, the applicant with a major concentration in Psychology must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also meet the following requirements:

1. Completion of 39 s.h. of the Uniform College Requirements including the following: a. Laboratory Science - 9 s.h. of courses in no less than two science areas *; b. Mathematics - 6 s.h. selected from MA 103-107 and MA 206; C. American History - 6 s.h.

* Students who entered the College prior to fall semester, 1972, are required to complete 12 s.h. of courses.

2. Completion of 18 s.h. in the major concentration in Psychology, including 12 s.h. from the required course listing.
3. Completion of no less than 60 s.h. of course work; 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in Psychology

The concentration in Psychology requires 33 semester hours of course work and must include the following:

1. Required Courses (18s.h.):

PS 275--Experimental Psychology: Animal Learning, or
PS 276--Experimental Psychology: Human Learning
PS 231--Psychology of Learning, or
PS 281--Theories of Human Development
PS 209--Social Psychology, or
PS 232--Theories of Personality
PS 272--Abnormal Psychology
Two courses in Psychology at the "400" level.

2. Elective Courses (15 s.h.):

Five courses selected from the course offerings in Psychology.

C. Elementary Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Following admission to the program in Elementary Education, students majoring in Psychology pursue a particular course sequence both in Psychology and in Elementary Education in the junior and senior years.

Sequence I

Fall Semester, Junior Year:

Psychology courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for curriculum and Instruction courses.

Spring Semester, Junior Year:

Psychology courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Fall Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

Psychology courses - 3 s.h.

Elective courses - 12 s.h.

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Sequence II

Fall Semester, Junior Year:

Psychology courses - 6 s.h.

Elective courses - 9 s.h.

Spring Semester, Junior Year:

Psychology courses - 6 s.h.

Foundations of Education courses* -9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Fall Semester, Senior Year:

Psychology course - 3 s.h.

Elective course - 3 s.h.

Curriculum and Instruction courses - 9 s.h.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

COURSE OF STUDY FOR ELEMENTARY EDUCATION AND SOCIOLOGY (Bachelor of Science)

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education, the applicant with a major concentration in Sociology must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also meet the following requirements:

1. Completion of 39 s.h. of the Uniform College Requirements including the following: a. Laboratory Science - 9 s.h. of courses in no less than two science areas * ; b. Mathematics - 6 s.h. selected from MA 103-107; c. American History - 6 s.h.; d. Psychology - 3 s.h. selected from PS 161 or PS 163.

* Students who entered the College prior to fall semester, 1972, are required to complete 12 s.h. of courses.

2. Completion of 18 s.h. in the major concentration in Sociology, 15 s.h. of which must be in courses numbered "200" and above.
3. Completion of no less than 60 s.h. of course work; 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in Sociology

The concentration in Sociology requires 33 semester hours of course work and must include the following:

1. Required Courses (9 s.h.):

SO 101--Introduction to Sociological Analysis
SO 321--Contemporary Sociological Theories
SO 402--Research Methods in Sociology

2. Elective Courses (24 s.h.):

Eight courses selected from the course offerings in Sociology.

C. Elementary Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Following admission to the program in Elementary Education, students majoring in Sociology pursue a particular course sequence both in Sociology and in Elementary Education in the junior and senior years.

Sequence I

Fall Semester, Junior Year:

Sociology courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Spring Semester, Junior Year:

Sociology courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Fall Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

Sociology course - 3 s.h.

Elective courses - 12 s.h.

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Sequence II

Fall Semester, Junior Year:

Sociology courses - 6 s.h.

Elective courses - 9 s.h.

Spring Semester, Junior Year:

Sociology courses - 6 s.h.

Foundations of Education courses * - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Fall Semester, Senior Year:

Sociology course - 3 s.h.

Elective course - 3 s.h.

Curriculum and Instruction courses - 9 s.h.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

COURSE OF STUDY FOR ELEMENTARY EDUCATION AND SPANISH (Bachelor of Arts)

A. Prerequisites for Admission to Elementary Education

To qualify for admission to the teacher-education program in Elementary Education, the applicant with a major in Spanish must meet the requirements stated in "Academic Policies Concerning Teacher Education" and must also meet the following requirements:

1. Completion of 39 s.h. of the Uniform College Requirements including the following: a. Laboratory Science - 9 s.h. of courses in no less than two science areas * ; b. Mathematics - 6 s.h. selected from MA 103-107; c. American History - 6 s.h.; d. Psychology - 3 s.h. selected from PS 161 or PS 163.

* Students who entered the College prior to fall semester, 1972, are required to complete 12 s.h. of courses.

2. Completion of 18 s.h. in the major concentration in Spanish from the required course listing.
3. Completion of no less than 60 s.h. of course work; 63 s.h. required for students who entered the College prior to fall semester, 1972.

B. Concentration in Spanish

The concentration in Spanish requires 37 semester hours of course work and must include the following:

1. Required Courses (31 s.h.):

SP 241-242--Intensive Spanish
SP 251-252--Advanced Spanish Conversation
SP 331-332--Cultural Background and Survey of Latin-American Literature
SP 351-352--Advanced Spanish Composition
SP 372--Applied Linguistics
SP 397 or 398--Language Laboratory Practicum
SP 491--Directed Studies in Spanish Literature or SP 492--Directed Studies
in Latin-American Literature

2. Elective Courses (6 s.h.):

Two courses selected from the course offerings at the "400" level in Spanish literature.

C. Elementary Education

The teacher-education program in Elementary Education requires 33 semester hours of course work. Students seeking certification as teachers of transitional bilingual education must present 36 semester hours of course work in Education. Following admission to the program in Elementary Education, students majoring in Spanish pursue a particular course sequence both in Spanish and in Elementary Education in the junior and senior years.

Sequence I

Fall Semester, Junior Year:

Spanish courses - 7 s.h.

Foundations of Education courses* - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Spring Semester, Junior Year:

Spanish courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Fall Semester, Senior Year:

Curriculum and Instruction courses - 7-10 s.h.

Apprentice Teaching: Elementary - 8 s.h.

Spring Semester, Senior Year:

Spanish courses - 6 s.h.

Elective courses - 9 s.h.

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Sequence II

Fall Semester, Junior Year:

Spanish courses - 7 s.h.

Elective courses - 9 s.h.

Spring Semester, Junior Year:

Spanish courses - 6 s.h.

Foundations of Education courses* - 9 s.h.

* Prerequisites for Curriculum and Instruction courses.

Fall Semester, Senior Year:

Spanish courses - 6 s.h.

Curriculum and Instruction courses - 9 s.h.

Spring Semester, Senior Year:

Curriculum and Instruction courses - 7 s.h.

Apprentice Teaching: Elementary - 8 s.h.

ELEMENTARY EDUCATION
(Course Prefix EE)

ANALYSIS OF TEACHING

339 The study of selected principles of experimental, cognitive, and developmental psychology will be reviewed and applied to the teaching and learning of skills and concepts in the elementary school classroom. Study and practice is provided in the framing of behavioral objectives through task analysis. Instructional strategies for attaining goals of content, process, and social behavior will be derived from theories of reinforcement, concept acquisition, and intellectual development. 3 sh. (Fall, Spring).

READING: ELEMENTARY SCHOOL

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341 A critical analysis of fundamental issues and principles in the teaching of reading, including all phases of the elementary reading program. Particular attention is given to the assessment and use of a broad range of current materials and approaches designed for diagnostic and developmental teaching of reading. Research in reading and in allied disciplines is evaluated in terms of basic and applied values. McParland, Shannon. 3 sh. (Fall, Spring).

**LANGUAGE AND LITERATURE:
ELEMENTARY SCHOOL**

342 A course in the curriculum and teaching of language which examines the role of communication in the life of the child, analyzes procedures and materials for teaching oral and written communication, and develops procedures for organizing, teaching, and evaluating a literature program. Students develop a critical knowledge of a broad spectrum of literature for children. Biggy, Kiernan. 3 sh. (Fall, Spring).

MATHEMATICS: ELEMENTARY SCHOOL

343 Analyzes new approaches in the curriculum and teaching of mathematics in the elementary school with emphasis on the examination of concepts which are most appropriate for the development of mathematics curricula for children. Particular attention is given to the analysis and use of current materials, multimedia approaches, and inductive and problem-solving techniques. Kopley. 3 sh. (Fall, Spring).

**HUMANITIES AND SOCIAL STUDIES:
ELEMENTARY SCHOOL**

344 Examines conceptual approaches to the selection and organization of content for the teaching of the humanities and social studies in the elementary school. The major concern is the examination and evaluation of theories and strategies used in new programs, and the development and use of procedures to encourage thinking, discovery and creativity. Terris. 2 sh. (Fall, Spring).

SCIENCE: ELEMENTARY SCHOOL

345 Analyzes new approaches in the curriculum and teaching of science in the elementary school with emphasis on the examination of concepts which are most appropriate for the development of science curricula for children. Particular attention is given to the analysis and use of current materials, multimedia approaches, and inductive and problem-solving techniques. Patton, LaSalva. 2 sh. (Fall, Spring).

**TEACHING OF ENGLISH AS A SECOND
LANGUAGE**

352 A course which presents a contrastive analysis of English and key target languages,

followed by demonstration, discussion, and practical experience in the approaches, methods, and techniques used in teaching English to speakers of other languages. For language concentrators and bilingual students who wish to qualify for certification as teachers of bilingual education. Bousquet. 3 sh. (Spring).

BILINGUAL EDUCATION IN THE ELEMENTARY SCHOOL

353 An analysis of the approaches, techniques, and materials used in elementary school bilingual classes. Includes readings, discussions, and observation of language saturation programs and advanced bilingual classes at the elementary level. Required for certification in elementary school transitional bilingual education. Prerequisite: EE 352. Bousquet. 3 sh. (Fall).

APPRENTICE TEACHING: ELEMENTARY SCHOOL

441 Full-time apprentice teaching in the public elementary schools under the supervision of qualified teachers, principals, and members of the Education Department. Provides experience for the student in applying and extending his knowledge and ability in teaching. A seminar in teaching is required as part of this clinical experience. Prerequisites: EE 339, 341, 342, 343, 344, 345. Bilingual students and language concentrators who wish to qualify for certification as teachers of bilingual education receive supervised apprentice teaching experience in approved bilingual education classes in the public elementary schools under the supervision of qualified teachers, principals, and members of the Education Department. Prerequisites: EE 339, 341, 343, 344, 345, 352, 353. Biggy and members of Education Department. 8 sh. (Fall, Spring).

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EDUCATION ELECTIVES FOR TEACHER-EDUCATION STUDENTS

A course which carries the prefix designation "ED" may be of general interest to teacher-education students and may be elected by such students after admission to teacher-education programs in Elementary Education, Music Education, and Secondary Education. In accordance with his individual needs and interests, a qualified student may elect professional courses which are not required for his teaching program from those course listings with "FE" and "ED" prefixes.

EDUCATION (Course Prefix ED)

PROFESSIONAL NEGOTIATIONS FOR TEACHERS

401 Provides a basic understanding of the factors involved in professional negotiations for teachers in the public schools. Topics include professional policies and procedures, teacher

militancy, professional sanctions, and teacher rights and responsibilities in such areas as curriculum, student welfare, auxiliary services, and professional development. Members of teacher organizations, administrative staffs, school committees, and the legal profession who have engaged in collective bargaining will participate as consultants. Cunningham. 3 sh. (Fall, Spring).

DIRECTED STUDIES IN ELEMENTARY EDUCATION

491 A program of directed studies which affords the advanced student with an opportunity to pursue a problem of instruction through directed reading and research. The purpose is to sharpen and refine techniques for professional research and for instructional presentation. Prerequisite: Demonstrated proficiency in area of instructional studies and permission of the Chairman of the Education Department. 3 sh. (By arrangement).

DIRECTED STUDIES IN MUSIC EDUCATION

492 A program of directed studies which affords the advanced student with an opportunity to pursue a problem of instruction through directed reading and research. The purpose

is to sharpen and refine techniques for professional research and for instructional presentation. Prerequisite: Demonstrated proficiency in area of instructional studies and permission of the Director of Music Education. 3 sh. (By arrangement).

DIRECTED STUDIES IN SECONDARY EDUCATION

493 A program of directed studies which affords the advanced student with an opportunity to pursue a problem of instruction through directed reading and research. The purpose is to sharpen and refine techniques for professional research and for instructional presentation. Prerequisite: Demonstrated proficiency in area of instructional studies and permission of concerned Director of Secondary Education program. 3 sh. (By arrangement).





ENGLISH

William C. Burto, Chairman
Department of English

The Department of English offers a major concentration in English leading to the Bachelor of Arts degree and a supporting concentration in English for students who can arrange a second concentration. In conjunction with the Committee for American Studies, the Department also offers a major concentration in American Studies leading to the Bachelor of Arts or Bachelor of Science degree and a supporting concentration in American Studies for students who can arrange such a second concentration. The Department also offers a general minor study in English and specialized minors in English Literature, American Literature, and Drama.

American Studies Concentration

A concentration in American Studies provides a means by which students who are searching for an understanding of the relations among institutions, ideas, and aesthetic forms will be able to combine work in a number of scholarly disciplines to make meaningful statements about American culture, past and present. The program of American studies is flexible in structure, yet it insures that students will select courses in a variety of disciplines. Provision is made for developing a concentration emphasis in humanities or social science areas which are related to American culture. Students who pursue a humanities emphasis are subject to the requirements for the Bachelor of Arts degree and should select as a faculty advisor the designated coordinator from the Department of English. Students who pursue a social science emphasis are subject to the requirements for the Bachelor of Science degree and should select as a faculty advisor the designated coordinator from the Department of History and Political Science. Students who do not pursue an emphasis in the humanities or the social science areas may pursue programs under the requirements for the Bachelor of Arts or Bachelor of Science. Such students are advised to review these requirements carefully so that pertinent prerequisites will have been satisfied at the time specified for filing senior programs of study.

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Concentrations in American Studies (both the major degree concentration

and the supporting second concentration) consist of 30-45 hours of course work§ and must include the following:

1. EN 241-242--History of American Literature+
2. HI 246--Afro-American History or
SO 334--The Study of Minorities*, or
SO 345--Urban Sociology*
3. HI 305--American Intellectual History to 1890, or
HI 306--American Intellectual History since 1890, or
PH 352--Topics in American Philosophy
4. EN 311--Seminar in American Studies
5. EN 411--Seminar in American Studies

§HI 111-112--United States History is a prerequisite for the American Studies concentration and may be credited to General Education

+ EN 132--Types of Literature is a prerequisite for all literature courses offered by the English Department.

*SO 101--Introduction to Sociological Analysis is a prerequisite for SO 334 and SO 345

164 Eighteen hours of course work beyond that specified above must be taken from the offerings of the College which are cited below and as are periodically determined by the Committee for American Studies. Students who wish to pursue a humanities emphasis elect courses from Art, English, Music, and Philosophy areas. Students pursuing a social science emphasis elect courses from Economics, Geography, History, Political Science, and Sociology areas.

Authorized American Studies Electives

AH 211--American Art from Colonial Times to the Present

EC 201--American Economic Development to 1880

EC 202--American Economic Development since 1880

EC 221--Urban Economics

EC 308--Contemporary American Economic Issues

EN 313--The West in American Literature

EN 371--American Puritanism as a Literary Influence

EN 372--American Novel

EN 373--American Literature of the 20th Century

EN 401-402--Selected American Authors

EN 431--Emerson and Hawthorne
EN 432--Melville and Whitman
EN 491--Directed Studies in American Literature

GE 226--Geography of the United States and Canada

HI 231--Colonial America: History and Culture
HI 232--The Coming of the American Revolution
HI 233--The National Period
HI 234--Civil War and Reconstruction
HI 235--The South: Slavery and Reconstruction
HI 246--Afro-American History
HI 266--Major Issues in Current America
HI 271--American Diplomatic History to 1865
HI 272--American Diplomatic History since 1865
HI 277--Ethnic Groups in American Life
HI 301--The Gilded Age, 1877-1900
HI 302--Progressive America, 1900-1940
HI 303--Recent U.S. History, 1940 to the Present
HI 305--American Intellectual History to 1890
HI 306--American Intellectual History since 1890
HI 313--American Social History to 1890
HI 314--American Social History since 1890
HI 315--New England History
HI 318--The American Frontier
HI 324--The Rise of American Industrial Society
HI 332--Women in American History
HI 372--American Foreign Relations in the 20th Century

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MU 276--Survey of American Music

PH 352--Topics in American Philosophy

PO 225--State Government
PO 226--Municipal Government
PO 238--American Political Thought
PO 241--The American Presidency
PO 243--The American Congress
PO 322--The Origins and Development of American Political Parties
PO 336--The Making of American Foreign Policy
PO 348--Urban Politics

SO 222--Contemporary Social Problems
 SO 334--The Study of Minorities
 SO 341--Stratification: Class, Status, and Power
 SO 345--Urban Sociology
 SO 441--Character and Personality in American Society

Students intending to pursue teaching careers at the elementary or secondary level may apply to appropriate teacher-education programs at the end of their sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for Education. American Studies concentrators who anticipate application to the program in Elementary Education at the end of the sophomore year should consult the "Course of Study for Elementary Education and American Studies" and plan their programs accordingly. American Studies concentrators with an emphasis in areas of the humanities who plan to apply for the Secondary Education program in English Education should consult the "Curriculum Requirements for Secondary Education Programs" and the Director of English Education to insure that necessary prerequisite course work has been undertaken prior to the specified application dates. American Studies concentrators with an emphasis in the Humanities planning to take the teaching program in English Education must complete the following course work in addition to their concentration requirements:

EN 231--232--History of English Literature
 EN 224--Analysis of Modern English
 EN 302--Expository Analysis
 EN 423--Shakespeare I
 EN 481--Literature for the Adolescent

Students transferring to the College and wishing to concentrate in American Studies must make individual arrangements with designated coordinators from the Department of English or the Department of History and Political Science regarding satisfaction of underclass requirements.

English Concentration

A concentration in English provides students with a broad liberal-arts

education and encompasses specified course work in English, American, and Continental literature, historical and genre studies, writing, and language analysis. A concentration in English (both the major degree concentration and the supporting second concentration) consists of 30-45 hours of course work and must include the following:

1. EN 132--Types of Literature
2. EN 141--Great Books of Antiquity
3. EN 231-232--History of English Literature
4. EN 241-242--History of American Literature
5. EN 423--Shakespeare I
6. EN 223--History and Development of the English Language

The Department highly recommends that English concentrators take one course in English literature between 1660-1900, one course in modern English literature, and one course in American literature in addition to those courses cited above. The remaining courses for the concentration may be selected from the course offerings of the Department.

Students intending to pursue teaching careers at the elementary or secondary levels may apply to appropriate teacher-education programs at the end of their sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for Education. Students who anticipate application to the program in Elementary Education should consult the "Course of Study for Elementary Education and English" and plan their programs accordingly. English concentrators who pursue the program in Elementary Education are required to take EN 224--Analysis of Modern English or EN 302--Expository Analysis. Students who plan to apply for the Secondary Education program in English Education should consult the "Curriculum Requirements for Secondary Education Programs" and the Director of English Education to insure that necessary prerequisite course work has been undertaken prior to the specified application dates. Students planning to take the teaching program in English Education are required to take EN 224--Analysis of Modern English, EN 302--Expository Analysis, and EN 481--Literature for the Adolescent.

Students transferring to the College and wishing to concentrate in English must make individual arrangements with the Chairman of the English Department regarding satisfaction of underclass requirements.

Minor Areas of Study

Minor areas of study consist of 18-24 hours of course work selected in accordance with the following options and including at least 6 hours of courses which are numbered "300" or above.

1. Minor in English (general English minor)

EN 231-232--History of English Literature I and II	6 sh
EN 413--Shakespeare I	3 sh
One course in American literature	3 sh
English Electives	6-12 sh

2. Minor in English Literature

EN 231-232--History of English Literature I and II	6 sh
EN 413--Shakespeare I	3 sh
Electives in English literature	9-15 sh

3. Minor in American Literature

EN 241-242--History of American Literature I and II	6 sh
EN 231--History of English Literature I or	
EN 232--History of English Literature II	3 sh
Electives in American literature	9-15 sh

4. Minor in Drama

EN 381--Comedy	3 sh
EN 382--Tragedy	3 sh
EN 413-414--Shakespeare I and II	6 sh
Electives in Drama*	3-6 sh
Electives in Stagecraft or Acting	3-6 sh

* FR 422--Theatre and Anti-Theatre and

IT 375--Pirandello: His Theatre and Influence may be credited to the Drama minor.

DEPARTMENTAL COURSE OFFERINGS
ENGLISH (Course Prefix EN)

ENGLISH COMPOSITION

- 101 The study and application of the principles of effective writing. Develops awareness of diction, style, and grammatical usage. 3 sh. (Fall).

ENGLISH FOR FOREIGN STUDENTS

- 103 Individual English programs for the foreign student which include intensive practice in both reading and writing. Ford. 3 sh. (Fall).

ENGLISH FOR FOREIGN STUDENTS

- 104 A continuation of EN 103. Ford 3 sh. (Spring).

TYPES OF LITERATURE

- 132 The study of the accepted literary types of poetry, drama, and prose fiction. EN 132 is a corequisite or prerequisite for all literature courses offered by the Department. Prerequisite: EN 101 or equivalent. 3 sh. (Fall, Spring).

GREAT BOOKS OF ANTIQUITY

- 141 Representative literatures from the Bible, classical Greece, and imperial Rome are studied as embodiments of ancient views of life and reality. Prerequisite: EN 132. 3 sh. (Fall, Spring).

GREAT BOOKS OF THE MIDDLE AGES AND RENAISSANCE

- 143 Representative literary selections of the middle ages and renaissance are studied as embodiments of Christian views of life and reality. Prerequisite: EN 132. 3 sh. (Fall).

GREAT BOOKS OF THE MODERN PERIOD

- 145 Representative literary selections from the period of the enlightenment to the present are studied as embodiments of modern views of life and reality. Prerequisite: EN 132. 3 sh. (Fall).

DRAMA

- 201 The study of dramatic genres from classical to contemporary periods. Prerequisite: EN 132. 3 sh. (Fall).

POETRY

- 202 The study of poetic forms. Prerequisite: EN 132. 3 sh. (Spring).

PROSE FICTION

- 204 A study of prose narrative, mainly exemplified by the short story and the novel. Prerequisite: EN 132. 3 sh. (Spring).

MAJOR LITERARY MOVEMENTS

- 206 A study of neo-classicism, romanticism, and naturalism through representative works of American, English and continental artists, musicians, scientists and writers. Prerequisite: EN 132. Foy. 3 sh. (By demand).

LITERATURE AND MASS MEDIA

- 208 A survey of the interrelationships of mass media and literature in the 20th century with particular emphasis on the influence of cinema. Writers will include Mailer, Kesey, T. Wolfe, N. West, Beckett, Durrell, and Ionesco. Prerequisite: EN 132. Anderson. 3 sh. (Spring).

MAN AND THE FUTURE

- 209 An analysis of popular writings using fiction techniques aimed at influencing attitudes about the future. Among writers examined will be Dostoevsky, Nietzsche, Shaw, Orwell, Bradbury, Heinlein, and Azimov. Prerequisite: EN 132. Anderson. 3 sh. (Fall, 1973).

LITERATURE OF THE BIBLE

- 211 A literary and historical analysis of selected books of the Old and New Testaments with emphasis upon mythological, typological, archetypal and scientific interpretations. Prerequisite: EN 132. Guindon. 3 sh. (Fall, 1972).

CONTINENTAL FICTION IN TRANSLATION

- 212 The study of stories and novels by such authors as Tolstoy, Dostoyevsky, Flaubert, Stendahl, Proust, Gide, Mann, Kafka, Malraux, and Camus. Prerequisite: EN 132. 3 sh. (Spring).

LITERATURE OF RELIGIOUS EXPERIENCE

- 214 A study of selected works by Herbert, Milton, Hopkins, and Eliot. Prerequisite: EN 132. Stein. 3 sh. (Spring, 1973).

GENERAL SEMANTICS

- 222 A study of the principles of general semantics, with special emphasis upon their relevance for persuasion and propaganda. 3 sh. (Spring).

HISTORY AND DEVELOPMENT OF THE ENGLISH LANGUAGE

- 223 Examines English from a historical perspective as a basis for understanding the English language as it is now spoken and written. Studies the origin and development of English through phonetic, lexical, syntactical and semantic shifts in the language from its beginnings to the present. Kansanniva. 3 sh. (Fall, Spring).

ANALYSIS OF MODERN ENGLISH

- 224 Investigates the aims of grammatical and linguistic studies and the several meanings of grammar. Students are expected to develop basic competency in structural, traditional, and transformational-generative analysis of English. Roberts. 3 sh. (Spring).

HISTORY OF ENGLISH LITERATURE I

- 231 The historical development of English literature from the beginnings to Milton. Selected works by representative authors from each period are studied. 3 sh. (Fall).

HISTORY OF ENGLISH LITERATURE II

- 232 The historical development of English literature from Dryden to the beginning of the twentieth century. 3 sh. (Spring).

HISTORY OF AMERICAN LITERATURE I

- 241 The historical development of American literature from the Colonial Period to the Civil War. Selected works by representative authors from each period are studied. 3 sh. (Fall).

HISTORY OF AMERICAN LITERATURE II

- 242 The historical development of American literature from the Civil War to World War I. 3 sh. (Spring).

COMEDY

- 251 A study of popular comic forms such as Theater of the Absurd, "sick" humor, film, comedy of manners, fantasy, and fabliaux. Anderson. 3 sh. (Fall, 1972).

TRAGEDY

- 252 A study of the theory and practice of tragedy from the Greeks to the present. Friedman. 3 sh. (Spring, 1972).

THE EPIC

- 253 A study of epic forms and techniques from antiquity through the middle ages. Friedman. 3 sh. (Fall, 1973).

MYTH AND MYSTICISM IN MODERN AMERICAN POETRY

- 264 A study of the uses of myth and mysticism from Pound and Eliot to contemporary American poets. Ford 3 sh. (Spring, 1973).

STAGECRAFT

- 282 A functional approach to the study of theater arts. Participation in such workshop activity as scenery designing, bulging, painting, and lighting translates theory into practice. Kansanniva. 3 sh. (Fall, Spring).

ACTING

- 284 Studies and exercises in the elements and methods of acting. Projects are undertaken

with an eye to public productions at the end of the semester. Tillson. 3 sh. (Spring).

EXPOSITORY ANALYSIS

- 302 A review of the principles of exposition and their application to college writing. The course will also investigate problems of teaching and evaluating expository writing. Roberts. 3 sh. (Spring).

CREATIVE WRITING

- 303 A study of the theory and practice of writing poems or short stories or plays. Conducted as a seminar with close analyses of student work. Limited enrollment. Prerequisite; consent of instructor. Friedman. 3 sh. (Fall, 1972).

SEMINAR IN AMERICAN STUDIES

- 311 An interdisciplinary investigation of an important theme or issue of contemporary American society with emphasis upon such broad cultural phenomena as immigration, slavery, and value change. Relevant interdisciplinary problems of significance and method are also considered. Prerequisite: consent of instructor. 3 sh. (Fall, 1974).

THE WEST IN AMERICAN LITERATURE

- 313 A study of the impact of the West on American literature. Lewis. 3 sh. (Fall 1973).

LITERATURE OF THE SIXTEENTH CENTURY

- 323 A study of the prose and poetry of sixteenth century, excluding the drama. Landman. 3 sh. (Fall, 1972).

LITERATURE OF THE SEVENTEENTH CENTURY

- 324 A study of the major seventeenth century writers of prose and poetry against the philosophical and political background of the period. 3 sh. (Spring, 1973).

LITERATURE OF THE EIGHTEENTH CENTURY

- 326 An examination of the literature of eighteenth century from Swift to Burns Anderson. 3 sh. (Spring, 1974).

LITERATURE OF THE ROMANTIC PERIOD

- 328 A critical and historical study of the major writers of the Romantic period in England. Both poetry and prose writers are considered from Blake to Lamb. Guindon. 3 sh. (Spring, 1975).

LITERATURE OF THE VICTORIAN PERIOD

- 332 A critical and historical study of the major writers of the Victorian period in England. Both poetry and prose writers are considered, from Tennyson and Carlyle to the early Yeats and Pater. Guindon. 3 sh. (Spring, 1974).

FEMININE TRADITION IN THE ENGLISH NOVEL

- 345 Selected novels of Jane Austen, Charlotte and Emily Bronte, George Eliot, Virginia Woolf, and Elizabeth Bowen will be read. Attention will be given to the problems faced by these writers, as well as to their individual achievements. McGowan. 3 sh. (Fall, 1973).

BRITISH NOVEL

- 348 Reading and discussion of British novels from Defoe to the present. Haber. 3 sh. (Spring, 1973).

LITERATURE OF MODERN IRELAND

- 351 Reading and discussion of modern Irish literature from Yeats and Joyce to the present. McGowan. 3 sh. (Fall, 1972).

MODERN BRITISH LITERATURE

- 353 Reading and discussion of the works of such writers as Shaw, James, Conrad, Joyce,

Lawrence, Yeats, and Eliot. 3 sh. (Fall, 1973).

ENGLISH DRAMA TO 1603

361 A study of the development of English drama from the middle ages to 1603 (excluding Shakespeare). Kramer. 3 sh. (Fall, 1973).

ENGLISH DRAMA 1603-1642

362 A study of Jacobean and Stuart drama (excluding Shakespeare). Kramer. 3 sh. (Spring, 1974).

RESTORATION COMEDY

364 A study of the comic dramatists who wrote at the reopening of the theatre at Charles II's restoration in 1660. Led by Etherege, Wycherley, and Congreve, their witty, often bawdy, social comedies struck a blow against stultifying Puritanism. Their plays are studied against the social background of the age. Landman. 3 sh. (Spring, 1973).

AMERICAN PURITANISM AS A LITERARY INFLUENCE

371 The "Puritan mind" as seen in the writings of selected Colonial writers. Analysis of Puritanism in confrontation with other value systems in nineteenth and twentieth century literature. Zaitchik. 3 sh. (Fall, 1973).

AMERICAN NOVEL

372 A study of the development of the American novel within its historical and intellectual contexts. Zaitchik. 3 sh. (Spring, 1973).

AMERICAN LITERATURE OF THE TWENTIETH CENTURY

373 A study of twentieth century American short stories, novels, poetry and drama. Zaitchik. 3 sh. (Fall, 1973).

MODERN POETRY

375 A study of representative American and British poets. 3 sh. (Fall, 1972).

MODERN DRAMA

376 A study of representative modern plays from the late nineteenth century to the present. Tillson. 3 sh. (Spring, 1974).

MODERN FICTION

377 A study of representative modern short stories and novels. Haber. 3 sh. (Fall, 1972).

THEORY AND FUNCTION OF CRITICISM

385 Reading and discussion of some major statements on theories of literature from Plato and Aristotle to Brooks and Warren. To examine different critical approaches, selected drama (*King Lear*, *Endgame*) and selected contemporary poetry will also be assigned. Stein. 3 sh. (Spring, 1974).

RUSSIAN NOVEL

392 A study of Russian fiction, considering the national tradition against the background of contemporary literary and historical movements. 3 sh. (Spring, 1974).

SELECTED AUTHORS

401 An intensive study of a few authors' works. 3 sh. (Fall).

SELECTED AUTHORS

402 An intensive study of a few author's works. Not a continuation or repetition of EN 401. 3 sh. (Spring).

SEMINAR IN AMERICAN STUDIES

411 A continuation of the junior seminar in American studies, which is not a prerequisite. New combinations of problems afford the opportunity for better appreciating

the contributions and limitations of such disciplines as history, literature, art, music, sociology, anthropology, geography, economics, and political science to contemporary American issues. Prerequisite: consent of instructor. 3 sh. (Fall, 1975).

CHAUCER

- 421 An intensive reading in Middle English of selected works. Kramer. 3 sh. (Fall, 1973).

SHAKESPEARE I

- 423 A study of a selected number of the plays, including examples of the histories, tragedies, and comedies. 3 sh. (Fall).

SHAKESPEARE II

- 424 A study of a selected number of plays not included in EN 413. 3 sh. (Spring).

MILTON

- 426 A study of Milton's poems and selected major prose works against the background of seventeenth century English life and thought. McGowan. 3 sh. (Spring, 1974).

EMERSON AND HAWTHORNE

- 431 A study of the major ideas and literary techniques of Emerson and Hawthorne within the context of nineteenth century America. Zaitchik. 3 sh. (Fall, 1972).

MELVILLE AND WHITMAN

- 432 A study of the major ideas and literary techniques of Melville and Whitman within the context of nineteenth century America. Zaitchik. 3 sh. (Spring, 1974).

LITERATURE FOR THE ADOLESCENT

- 481 A study of literature for the adolescent, aimed at supplementing the required reading in the secondary school. Attention is given to

the historical development of the literature for that age, as well as to the contemporary trends. Caliri. 3 sh. (Fall).

DIRECTED STUDIES IN LITERATURE

- 491 The student, through regular and frequent consultation with his instructor, develops a course of directed reading in literature and defines a problem for individual research. 3 sh. Prerequisite: Permission of instructor. (By arrangement).

DIRECTED STUDIES IN LANGUAGE ANALYSIS

- 492 The student, through regular and frequent consultation with his instructor, develops a course of directed reading in linguistics, semantics, or stylistics, and defines a problem for individual research. Prerequisite: Permission of instructor. 3 sh. (By arrangement).

DIRECTED STUDIES IN CREATIVE WRITING

- 493 The student through regular and frequent consultation with his instructor pursues a special problem of creative expression. 3 sh. Prerequisite: Permission of instructor. (By arrangement).

ADVANCED TUTORIAL IN ENGLISH

- 495 A program of directed studies which affords the advanced student with an additional opportunity to pursue a previously explored problem in greater depth or to initiate an additional problem. The purpose is to sharpen and refine techniques for scholarly research and presentation or for creative expression. Prerequisite: Demonstrated proficiency in an area selected for directed studies and permission of instructor. 3 sh. (By arrangement).

Special reference is made to PH 305 -- Philosophy of Language which may be credited to the English concentration.

HISTORY AND POLITICAL SCIENCE

Patricia Goler, Chairman
Department of History and Political Science

The Department of History and Political Science offers major concentrations in History and Political Science leading to the degrees of Bachelor of Arts and Bachelor of Science. Supporting concentrations in History and Political Science are also offered by the Department for students who can arrange second concentrations. In conjunction with the Committee for American Studies, the Department also offers a major concentration in American Studies leading to the Bachelor of Arts or Bachelor of Science degree and a supporting concentration in American Studies for students can arrange such a second concentration. The Department also offers minor areas of study in American History, Classical Civilization, History, Political Science, and Social Science.

American Studies Concentration

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A concentration in American Studies provides a means by which students who are searching for an understanding of the relations among institutions, ideas, and aesthetic forms will be able to combine work in a number of scholarly disciplines to make meaningful statements about American culture, past and present. The program in American studies is flexible in structure, yet it insures that students will select courses in a variety of disciplines. Provision is made for developing a concentration emphasis in humanities or social science areas which are related to American culture. Students who pursue a humanities emphasis are subject to the requirements for the Bachelor of Arts degree and should select as a faculty advisor the designated coordinator from the Department of English. Students who pursue a social science emphasis are subject to the requirements for the Bachelor of Science degree and should select as a faculty advisor the designated coordinator from the Department of History and Political Science. Students who do not pursue an emphasis in the humanities or the social science areas may pursue programs under the requirements for the Bachelor of Arts or Bachelor of Science. Such students are advised to review these requirements carefully so that pertinent prerequisites will have been satisfied at the time specified for filing senior programs of study.

Concentrators in American Studies (both the major degree concentration and

the supporting second concentration) consist of 30-45 hours of course work§ and must include the following:

1. EN 241-242--History of American Literature +
2. HI 246--Afro-American History, or
SO 334--The Study of Minorities,*or
SO 345--Urban Sociology*
3. HI 305--American Intellectual History to 1890, or
HI 306--American Intellectual History since 1890, or
PH 352--Topics in American Philosophy
4. HI 311--Seminar in American Studies
5. HI 411--Seminar in American Studies

§ HI 111-112--United States History is a prerequisite for the American Studies concentration and may be credited to General Education.

+EN 132--Types of Literature is a prerequisite for all literature courses offered by the English Department.

*SO 101--Introduction to Sociological Analysis is a prerequisite for SO 334 and SO 345.

176 Eighteen hours of course work beyond that specified above must be taken from the offerings of the College which are cited below and as are periodically determined by the Committee for American Studies. Students who wish to pursue a humanities emphasis elect courses from Art, English, Music, and Philosophy areas. Students pursuing a social science emphasis elect courses from Economics, Geography, History, Political Science, and Sociology areas.

Authorized American Studies Electives

AH 211--American Art from Colonial Times to the Present

EC 201--American Economic Development to 1880

EC 202--American Economic Development since 1880

EC 221--Urban Economics

EC 308--Contemporary American Economic Issues

EN 313--The West in American Literature

EN 371--American Puritanism as a Literary Influence

EN 372--American Novel

EN 373--American Literature of the 20th Century

EN 401-402--Selected American Authors

EN 431--Emerson and Hawthorne
EN 432--Melville and Whitman
EN 491--Directed Studies in American Literature

GE 226--Geography of the United States and Canada

HI 231--Colonial America: History and Culture
HI 232--The Coming of the American Revolution
HI 233--The National Period
HI 234--Civil War and Reconstruction
HI 235--The South: Slavery and Reconstruction
HI 246--Afro-American History
HI 266--Major Issues in Current America
HI 271--American Diplomatic History to 1865
HI 272--American Diplomatic History since 1865
HI 277--Ethnic Groups in American Life
HI 301--The Gilded Age, 1877 - 1900
HI 302--Progressive America, 1900 - 1940
HI 303--Recent U.S. History, 1940 to the Present
HI 305--American Intellectual History to 1890
HI 306--American Intellectual History since 1890
HI 313--American Social History to 1890
HI 314--American Social History since 1890
HI 315--New England History
HI 318--The American Frontier
HI 324--The Rise of American Industrial Society
HI 332--Women in American History
HI 372--American Foreign Relations in the 20th Century

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MU 276--Survey of American Music

PH 352--Topics in American Philosophy

PO 225--State Government
PO 226--Municipal Government
PO 238--American Political Thought
PO 241--The American Presidency
PO 243--The American Congress
PO 322--The Origins and Development of American Political Parties
PO 336--The Making of American Foreign Policy
PO 348--Urban Politics

- SO 222--Contemporary Social Problems
- SO 334--The Study of Minorities
- SO 341--Stratification: Class, Status, and Power
- SO 345--Urban Sociology
- SO 441--Character and Personality in American Society

Students intending to pursue teaching careers at the elementary or secondary level may apply to appropriate teacher-education programs at the end of their sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for Education. American Studies concentrators who anticipate application to the program in Elementary Education at the end of the sophomore year should consult the "Course of Study for Elementary Education and American Studies" and plan their programs accordingly. American Studies concentrators with an emphasis in areas of the social sciences who plan to apply for the Secondary Education program in Social Science Education should consult the "Curriculum Requirements for Secondary Education Programs" and the Director of Social Science Education to insure that necessary prerequisite course work has been undertaken prior to the specified application dates.

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Students transferring to the College and wishing to concentrate in American Studies must make individual arrangements with designated coordinators from the Department of English or the Department of History and Political Science regarding satisfaction of underclass requirements.

History Concentration

A concentration in History provides students with a broad introduction to civilizations of the past and present, including those of Antiquity, Europe, America, and the Third World, plus a through grounding in the historical process. Through a broad exposure of the complexities shaping the forces of civilization, the History concentrator gains a special perspective by which he can view human thought and action while also developing his ability to determine bias, to make valid generalizations, to draw valid inferences, and to perceive the significance of fact within the framework of interpretation. Thus, the concentration in History provides a meaningful background for those

students who desire to enter government service, politics, law, teaching, and business. A concentration in History (both the major degree concentration and the supporting second concentration) consists of 36-45 hours of course work and must include the following:

1. HI 105--European History to 1715
2. HI 106--European History since 1715
3. HI 296--Introduction to Historical Study
4. HI 432--Research Seminar in History

The Department also requires one course in the Third World, two courses on or above the "200" level in both European and American History, and two additional courses in either European or American history. The remaining courses for the concentration may be selected from history course offerings.

Students intending to pursue teaching careers at the elementary or secondary levels may apply to appropriate teacher-education programs at the end of their sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for **Education**. Students who anticipate application to the program in Elementary Education should consult the "Course of Study for Elementary Education and History" and plan their programs accordingly. History concentrators who plan to apply for the Secondary Education program in Social Science Education should consult the "Curriculum Requirements for Secondary Education Programs" and the Director of Social Science Education to insure that necessary prerequisite course work has been undertaken prior to the specified application dates. Students planning to take the teaching program in Social Science Education are also required to take 6 hours of course work in each of three of the following four areas: Economics, Geography, Political Science, and Sociology. This course work may be completed as part of the General Education requirements but at least 9 of the required 18 credits must be in courses on or above the "200" level.

Students transferring to the College and wishing to concentrate in History must make individual arrangements with the Chairman of the Department of History and Political Science regarding satisfaction of underclass requirements.

Political Science Concentration

The concentration in Political Science is designed to provide a knowledge of the functions and theories of the state and the nature, problems and development of politics and government on the local, national, and international levels. The courses are designed to help the student develop an understanding of the political process and an ability to analyze political systems, relationships, and problems. Pragmatically, the concentration affords preparation for social science teaching, graduate education, law school, public service, and intelligent citizenship. A concentration in Political Science (both the major degree concentration and the supporting second concentration) consists of 33-45 hours of course work and must include the following:

1. PO 101--Introduction to Political Science
2. PO 432--Research Seminar in Politics

The Department also requires at least one course on or above the "200" level in each of the following sub-areas: American Politics, Comparative Politics, International Relations, and Political Theory. The Department strongly recommends that Political Science concentrators select supporting course work from Economics, Geography, History, and Sociology. The Department also encourages students to select minor areas of study or supporting second concentrations in related social science disciplines.

Students intending to pursue teaching careers at the elementary or secondary levels may apply to appropriate teacher-education programs at the end of their sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for **Education**. Students who anticipate application to the program in Elementary Education should consult the "Course of Study for Elementary Education and Political Science" and plan their programs accordingly. Political Science concentrators who plan to apply for the Secondary Education program in Social Science Education should consult the "Curriculum Requirements for Secondary Education Programs" and the Director of Social Science Education to insure that necessary prerequisite course work has been undertaken prior to the specified application dates. Students planning to take the teaching program in Social Science Education are also required to take 6 hours of course work in each of three of the following four areas: Economics, Geography, History, and Sociology. This course work may be completed as part

of the General Education requirements but at least 9 of the required 18 credits must be in courses on or above the "200" level.

Students transferring to the College and wishing to concentrate in Political Science must make individual arrangements with the Chairman of the Department of History and Political Science regarding satisfaction of underclass requirements.

Minor Areas of Study

Minor areas of study consist of 18-24 hours of course work and are offered in the following fields: American History, History, Political Science, Social Science, and Classical Civilization. At least 6 hours must be taken in course work at the "300" level or above in fulfilling the requirements for each of these minor areas. Course work for a minor in American History, History, and Political Science is selected by the student in consultation with his advisor. Course work for a minor in Social Science must be selected from three of the following sub-areas: economics, geography, political science, and sociology. At least 9 hours must be in one area, 6 hours in a second area, and 3 hours in a third area. History concentrators should note that they may not count history courses for the Social Science minor. Similarly, Political Science courses may not be counted for the minor by Political Science concentrators.

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Course work for a minor area of study in Classical Civilization is selected in consultation with Dr. Bentas from the following course offerings of the College.

HI 101, 225, 226, 261, 378; CL 251, 252, 351, 352, 451, 452;
PH 251; GK 101, 102, 201, 301, 302; LA 101, 102, 201,
202, 301, 302.

Course work for the Classical Civilization minor must be distributed in three areas with at least 9 hours in one area, 6 hours in a second area, and 3 hours in a third area. Although course work in Latin or Greek is not required for the minor, students are urged to complete at least 6 hours of the minor in a classical language at the intermediate level.

DEPARTMENTAL COURSE OFFERINGS:

I ECONOMICS (Course Prefix EC)

PRINCIPLES OF ECONOMICS I

101 An introduction to economic principles and problems. Describes economic institutions and analyzes their functioning in modern economies. Sanz. 3sh. (Fall, Spring).

PRINCIPLES OF ECONOMICS II

102 A continuation of EC-101, which is not a prerequisite. A study of basic characteristics, processes, and institutions of economic systems, with special emphasis upon significant problems arising in their operations. Sanz. 3sh. (Spring).

ECONOMIC DEVELOPMENT OF THE NORTH ATLANTIC COMMUNITY

217 An historical analysis of the development of the modern Keynesian mixed economy of private and public enterprise as it evolved from the Industrial Revolution to its present structure in Europe and the U.S. Basic concepts of economic theory will be used to give a broader insight into the development of the organization and functioning of the current economic system. Sanz. (By demand).

AMERICAN ECONOMIC DEVELOPMENT TO 1880

201 A study of the major factors contributing to the development of economic growth and the issues that the Nation faced since colonial times to industrialization. Sanz. 3sh. (By demand).

AMERICAN ECONOMIC DEVELOPMENT SINCE 1880

202 Traces the more important issues in late nineteenth century to the present time. Sanz. 3 sh. (By demand).

MONEY AND BANKING

205 A study of both the Federal Reserve System and commercial banking processes. Sanz. 3sh. (By demand).

URBAN ECONOMICS

221 Application of economic theory to urban problems; topics include slums, residential segregation, intracity location of economic activity, urban renewal, urban sprall, transportation, and governmental organization. Sanz. 3sh. (By demand).

PROBLEMS IN ECONOMIC DEVELOPMENT

302 An investigation of problems faced by developing countries with respect to population, agricultural reform, industrialization, and economic growth. Special emphasis is placed upon Latin America and Southeast Asia. Sanz. 3sh. (By demand).

COMPARATIVE ECONOMIC SYSTEMS

304 A comparative study of the major economies under the mixed enterprise system and the socialist structure. A theoretical comparison of both capitalism and marxist economic thought will be made. Sans. 3 sh. (By demand).

TOPICS IN LATIN AMERICAN ECONOMIC PROBLEMS

305 Problems faced by the developing countries of Latin America with respect to population, agricultural reform, industrialization, and economic growth. Sanz. 3sh. (By damand).

CONTEMPORARY AMERICAN ECONOMIC ISSUES

308 Selected topics in fiscal and monetary policies, income distribution and welfare, oligopolistic structure, urban problems and international trade. Sanz. 3sh. (By demand).

II GEOGRAPHY (Course Prefix GE)

WORLD AND REGIONAL GEOGRAPHY

- 101 A survey of the significance, characteristics, and principal geographical problems of the world's major geographical regions. 3 sh. (By demand).

GEOGRAPHY OF THE UNITED STATES AND CANADA

- 226 A regional geography of North America, with emphasis on the human and physical characteristics of different geographic regions and their interaction with each other. 3 sh. (By demand).

INTRODUCTION TO HUMAN GEOGRAPHY

- 234 An analysis of the patterns of man's occupancy of the earth; the study is both regional and systematic and is carried out against a background of today's world. 3 sh. (By demand).

URBAN GEOGRAPHY

- 244 An introductory study into the social, economic, and environmental-technological changes that have occurred in earth landscapes that have become urbanized. Contemporary problems of urban growth and development are studied giving attention to certain specific cities throughout the World. 3 sh. (By demand).

III HISTORY (Course Prefix HI)

CLASSICAL CIVILIZATION

- 101 The political, social and cultural history of the Graeco-Roman world from the age of Heroes to the fall of the Roman Empire. 3sh. (Fall, Spring).

EUROPEAN HISTORY TO 1715

- 105 Traces the major forces in the development of European history from the fall of the

Roman Empire to 1715. 3sh. (Fall, Spring).

EUROPEAN HISTORY SINCE 1715

- 106 Examines the major forces in the development of modern European history from the French Revolution to the present. 3sh. (Fall, Spring).

UNITED STATES HISTORY TO 1877

- 111 Traces the development of American history and institutions from colonization to the end of Reconstruction. 3sh. (Fall, Spring).

UNITED STATES HISTORY SINCE 1877

- 112 Examines significant developments in American history from the end of the Reconstruction period to the present. 3sh. (Fall, Spring).

PREHISTORY AND THE BEGINNING OF CIVILIZATION

- 211 The prehistory of human society. Topics include: the archaeological and anthropological evidence, the problem of the genesis of civilization, the spread of the higher cultures, and the emergence of the classical civilizations in the Old and New Worlds. Derry. 3sh. (Fall).

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EUROPE IN THE MIDDLE AGES

- 213 A survey of European history during the formative period: from the fall of the Western Roman Empire through the thirteenth century. Derry. 3sh. (Fall, 1973).

RENAISSANCE AND REFORMATION.

1300-1555

- 217 An analysis of European civilization from the High Middle Ages to the mid-sixteenth century. The emphasis is on the breakup of the medieval world and the political, cultural, economic and religious changes associated with the Renaissance and Reformation eras. P. Blewett. 3sh. (Fall, 1972).

EUROPEAN IN THE 17-18th CENTURIES

- 218 The course gives attention to the intellectual and political climates of opinion as well as the social and economic institutions of the Old Regime. P. Blewett. 3sh. (Spring, 1973).

EUROPE IN THE NINETEENTH CENTURY

- 221 Traces the developments in nineteenth century Europe from the Congress of Vienna to the crisis of national imperialism. Emphasis is on nationalism, industrialism and the changing patterns of power. Mathieson. 3sh. (Fall, 1972).

EUROPE IN THE TWENTIETH CENTURY

- 222 An examination of selected topics in European history from 1914 to the present: World War I, the Versailles conference, unrest and the collapse of collective security, the rise of Communism, Facism and Nazism, World War II and post-war developments. Shea. 3sh. (Spring, 1973).

ANCIENT GREEK HISTORY & CIVILIZATION

- 225 A study of Greek history, institutions and culture from Minoan times through the Hellenistic period. Bentas. 3sh. (Fall, 1972).

ROMAN HISTORY AND CIVILIZATION

- 226 An analysis of the history, institutions and culture of the Roman Republic and Empire from earliest times to 330 A.D. Bentas. 3sh. (Spring, 1973).

COLONIAL AMERICA: HISTORY AND CULTURE

- 231 Seventeenth century America, with emphasis on the relationship between European cultural patterns and the American environment. Carroll. 3sh. (Fall).

THE COMING OF THE AMERICAN REVOLUTION

- 232 Eighteenth century America, with emphasis

on topics related to the development of the conflict between the Colonies and England. Carroll. 3sh. (Spring).

THE NATIONAL PERIOD

- 233 A study of the period during which America united "to form a more perfect union". Special emphasis on the origins of Jeffersonian and Jacksonian democracy and their social content, reform movements and the origin of abolitionism. Norton. 3sh. (Fall).

CIVIL WAR AND RECONSTRUCTION

- 234 Examines the Civil War and Reconstruction in terms not only of events but also of the traditional and revisionist interpretations. Norton. 3sh. (Spring).

THE SOUTH: SLAVERY AND RECONSTRUCTION

- 235 In-depth analysis of the influence of slavery on the development of the South as a section. The Southern reaction to Reconstruction will also be considered. Bergeron. 3sh. (Fall, 1973).

LATIN AMERICAN HISTORY TO 1824

- 241 A survey of the history and institutions of Latin America from the beginnings of the colonial era through the period of independence. Luter. 3sh. (Fall).

LATIN AMERICAN HISTORY SINCE 1824

- 242 Selected topics in the history of Latin America from the period of independence to the present. Luter. 3sh. (Spring).

AFRO-AMERICAN HISTORY

- 246 The experience of the Blacks in America from colonial times to the present, including such topics as the African background, slavery in the U.S. and South America, 20th century protest, Afro-American literature, and the problems of the cities. Bakken. 3sh. (Spring).

HISTORY OF JAPAN SINCE 1600

- 248 A study of traditional Japanese institutions and the transformation of Japan into a modern state after 1868; the Tokugawa shogunate, Meiji restoration, Russo-Japanese War, world power status, militarism and World War II, and present day Japan. Shea. 3sh. (Spring, 1973).

FRANCE SINCE 1814

- 254 A consideration of the evolution of France in its broad European setting from the Bourbon restoration through the Fifth Republic. The course examines the interaction of social, economic, political and diplomatic trends, with particular attention to the struggle between the Right and the Left. Shea. 3sh. (Fall).

HISTORY OF GERMANY TO 1789

- 255 The political and cultural development of the German nation from the early middle ages through the 18th century. Mattheisen. 3 sh. (Fall, 1973).

HISTORY OF GERMANY SINCE 1789

- 256 A survey of 19th and 20th century Germany, with special emphasis upon the years between the two world wars. Mattheisen. 3 sh. (Fall, 1972).

HISTORY OF RUSSIA TO 1796

- 257 The growth of the Russian state: Varangian origins, the Kievan state, conversion to Christianity, Mongol domination, the rise of Muscovy, Europeanization and expansion under Peter the Great and Catherine the Great. Shea. 3sh. (Fall, 1972).

HISTORY OF RUSSIA IN THE 19-20TH CENTURIES

- 258 Selected topics in modern Russian history: political and social reforms of the nineteenth century, international policies in Europe and Asia, the 1917 Revolutions, development of

the new regime under Lenin, Stalinist policies, and World War II and Russian expansion. Shea. 3sh. (Fall, 1973).

GREEK AND ROMAN HISTORIANS

- 261 Extensive reading in English translation of important Greek and Roman historians. Historians studies include Herodotus, Thucydides, Xenophon, Livy, Tacitus and Procopius. Bentas. 3sh. (Fall, 1973).

ANCIENT EGYPT

- 264 The history and culture of Egypt from prehistoric beginnings through pharaonic times to the Roman conquest. P. Blewett. 3sh. (Spring, 1973).

MAJOR ISSUES IN CURRENT AMERICA

- 266 An examination of the significant issues facing America: the Vietnam War, the Black Liberation movement, and the Cold War. Students will determine the actual issues to be studied. Goler. 3sh. (Fall, 1973).

AMERICAN DIPLOMATIC HISTORY TO 1865

- 271 A study of the development, significant changes, and major encounters in American diplomacy from the foundation of the Republic through the Civil War. Norton. 3sh. (Fall).

AMERICAN DIPLOMATIC HISTORY SINCE 1865

- 272 A study of the growth, evolution, and challenges in American diplomacy from the post-Civil War period to the present. Norton. (Spring).

ETHNIC GROUPS IN AMERICAN LIFE

- 277 An examination of the importance of ethnic groups in American history. The course will treat several major ethnic groups and assimilation or non-assimilation into American life. Field work and research on ethnic groups in the Merrimack Valley. Bakken. 3sh. (Fall, 1972).

INTRODUCTION TO HISTORICAL STUDY

296 This course introduces the undergraduate student to what the historian does. In addition to analysis of significant historical and historiographical concepts, emphasis is on methods of research and bibliography, the technical and stylistic problems involved in the presentation of research in scholarly form. Required for all history majors in sophomore year. Carroll, Derry. 3sh. (Spring).

THE GILDED AGE, 1877-1900

301 A study of the gigantic expansion of American industry after Reconstruction and the social tensions generated by the impact of finance capitalism. Backed by industrial might, the U.S. takes a place among the great powers after the Spanish-American War. M. Blewett. 3sh. (Fall, 1972, 1974).

PROGRESSIVE AMERICA, 1900-1940

186 302 The profound economic and social changes of the preceding thirty years produces an era of reform in American history, beginning in 1900 with Theodore Roosevelt and ending with the New Deal and the establishment of welfare capitalism. M. Blewett. 3sh. (Spring).

RECENT U.S. HISTORY, 1940 TO THE PRESENT

303 The involvement of the U.S. in World War II marks a major turning point in American history. It ushers in twenty years of Cold War tensions, the militarization of society and participation in foreign alliances and limited wars. Anti-communist conservatives, militant Blacks, and a New Left polarize politics and produce a contemporary crisis of confidence in American Society. M. Blewett. 3sh. (Fall, 1972, 1974).

AMERICAN INTELLECTUAL HISTORY TO 1890

305 Selected topics in intellectual history from

colonial times to the Civil War. Examines the major intellectual currents and the interaction between ideas and social structure. Topics include Puritanism, political philosophy, the pursuit of an American style, slavery and the sectional conflict, Transcendentalism and social reform, Social Darwinism. Bakken. 3sh. (Fall, 1972).

AMERICAN INTELLECTUAL HISTORY SINCE 1890

306 Selected topics in intellectual history, concentrating on the twentieth century thinkers. Topics include Pragmatism and its critics, 20th century political thought, critiques of American values, Black social thought. Other topics to be selected by students. Prerequisite: HI 305 or permission of instructor. Bakken. 3 sh. (Spring, 1973).

SEMINAR IN AMERICAN STUDIES

311 An interdisciplinary investigation of an important theme or issue of contemporary American society with emphasis upon such broad cultural phenomena as immigration, slavery, and value change. Relevant interdisciplinary problems of significance and method are also considered. Prerequisite: consent of instructor. Carroll. 3sh. (Fall, 1974).

AMERICAN SOCIAL HISTORY TO 1880

313 Selected topics in American social history, including mobility and class structure in American life, American religion, ideals of family life and child rearing, race and ethnic groups in American life, myths and reality in American economic life. Bakken. 3sh. (Fall, 1973).

AMERICAN SOCIAL HISTORY SINCE 1890

314 A continuation of the preceding. Prerequisite: HI 311 or permission of the instructor. Bakken. 3sh. (Spring, 1974).

NEW ENGLAND HISTORY

- 315 Studies of New England as a distinct and unique section of the U.S. Particular emphasis will be placed on the political history of New England and the contributions of this region to national development. Bergeron. 3sh. (Fall, 1972).

THE AMERICAN FRONTIER

- 318 Readings and discussion of the history of the American frontier and the place of the frontier in American society and thought. Bergeron. 3sh. (Spring, 1974).

THE RISE OF AMERICAN INDUSTRIAL SOCIETY

- 324 Selected topics in the economic history of the United States. Topics include: railroads and the development of a national market, the exploitation of natural resources, the rise of new industries, the problems of labor, the consolidation of business, and the problems of agriculture in the new industrial state. Carroll, 3sh. (Spring, 1973).

VALUE CONFLICTS IN AMERICAN HISTORY

- 325 A study of value conflicts in America with specific reference to the teaching of history. Bergeron. 3 sh. (Fall, 1st 8 wks.).

WOMEN IN AMERICAN HISTORY

- 332 A study of women as a social group in American history. M. Blewett. 3sh. (Spring).

ENGLAND IN THE MIDDLE AGES

- 352 A study of the English people and nation from the Roman conquest to 1485, with special emphasis on the development of political and social institutions. Derry. 3sh. (Spring, 1972).

TUDOR ENGLAND, 1485-1603

- 353 An intensive study of the social, economic, and constitutional structure of England as it emerged from the middle ages. P. Blewett. 3sh. (By demand).

STUART ENGLAND, 1603-1714

- 354 A sequel to HI 353 (which is not a prerequisite), the course offers a close study of the process by which the problems implicit in Tudor England were resolved in a century of revolution. P. Blewett. 3sh. (Spring, 1974).

THE SECOND WORLD WAR

- 357 An examination of selected topics in World War II. Mattheison. 3sh. (Spring, 1973).

AMERICAN HISTORY AND BIOGRAPHY

- 367 A biographical approach to the history of the period from 1789-1865 with emphasis on significant and representative personalities and their contributions to American development. Approximately 10 biographies will be assigned. Bergeron. 3sh. (By demand).

AMERICAN FOREIGN RELATIONS IN THE TWENTIETH CENTURY

- 372 An appraisal of United States foreign policies, the American reaction to the changing international situation, and the American policies of other governments in the present century. Topics include: Asian rivalries, the rise of Anglo-American friendship, World War I, the retreat to isolationism, World War II, and the policies of the Cold War. Goler. 3 sh. (Spring, 1974).

THE CATHOLIC CHURCH, 1300-1871

- 375 Emphasizes the rise of the modern papacy and the development of the doctrine of infallibility, with attention to other topics such as Gallicanism, Christian Humanism, and Erastianism. P. Blewett. 3sh. (By demand).

MODERN EUROPEAN IMPERIALISM

- 376 Motives, methods, and results of imperialism in the nineteenth and twentieth centuries; the partition of Africa and the penetration of Asia as contrasting phases in the expansion of Europe. Shea. 3sh. (Spring, 1974).

BYZANTINE HISTORY AND CIVILIZATION

- 378 A study of the important political, social, and cultural changes in the East Roman Empire from the founding of Constantinople to the fall of the Empire in 1453, with emphasis on the role of Byzantium as the custodian of the classical past. Bentas. 3sh. (Spring, 1974).

HISTORY OF MODERN CHINA

- 381 A survey of the nineteenth and twentieth centuries and the forces which have shaped the course of recent Chinese history. 3sh. (Fall, 1972).

CLASSICAL AND MEDIEVAL POLITICAL THOUGHT

- 385 A survey of classical and early Christian (387) political thinkers with special concentration on the origins and development of significant political ideas and institutions in Western Europe from the fifth through fifteenth centuries. Derry. 3sh. (Fall, 1972).

188 MODERN EUROPEAN POLITICAL THOUGHT

- 386 Main currents of modern European political thought are investigated through the works of Machiavelli, Hobbes, Locke, Rousseau, Hegel, Marx, Mill, and Lenin. Mattheisen. 3 sh. (Spring, 1974).

EARLY MIDDLE AGES: FRANCE AND ENGLAND

- 392 A study of the end of the Roman Empire and (388) the beginnings of the new Christian, Germanic civilization of western Europe. Derry. 3sh. (Spring, 1973).

THE FRENCH REVOLUTION AND EMPIRE

- 396 A close analysis of French society from 1715 - 1815 which attempts to understand the causes of the French Revolution and its aftermath. P. Blewett. 3sh. (Spring, 1974).

HISTORY OF ENGLAND SINCE 1815

- 397 A study of English life and politics in modern

times and of the changing role of Britain in international affairs. 3sh. (Fall, 1972).

SEMINAR IN AMERICAN STUDIES

- 411 A continuation of the junior seminar in American studies which is not a prerequisite. New combinations of problems afford the opportunity for better appreciation the contributions and limitations of such disciplines as history, literature, art, music, sociology, anthropology, geography, economics, and political science to contemporary American issues. Prerequisite: consent of instructor. Carroll. 3sh. (Fall, 1975).

READING SEMINAR IN HISTORY

- 421 An intensive survey of an area of historical research. In addition to familiarizing the student with the pertinent literature in the field, the student will be expected to read, analyze, and discuss a book or topic each week. Students will produce several essays during the term to serve as a basis for class discussion. Prerequisites: Permission of instructor. 3sh. (By demand).

RESEARCH SEMINAR IN HISTORY

- 432 Original research and wide reading in the secondary literature leading to the writing of a major paper based on systematic research and methodological techniques. Weekly meetings and reports. Prerequisite: Permission of instructor. 3 sh. (By demand).

DIRECTED STUDIES IN HISTORY

- 491 Through frequent consultation with the instructor, the student will investigate and define a problem for research, the results to be presented in a significant paper. Prerequisite: Permission of instructor. 3 sh. (By arrangement).

ADVANCED TUTORIAL IN HISTORY

- 495 A program of directed studies in which the student through regular consultation with his instructor develops an evaluative and critical

essay. The purpose is to sharpen and refine techniques for scholarly research and presentation. This course may not be offered in place of required seminar courses. Prerequisite: Demonstrated proficiency in an area selected for directed studies and permission of instructor. 3 sh. (By arrangement).

Special reference is made to the following courses which may be credited to the History minor and the History concentration: PO 238--American Political Thought, PO 242--American Political Parties and Interest Groups, PO 252--Historical Development of Nationalism, PO 282--Modern Political Theory, PO 322--Origins and Development of American Political Parties, PO 336--The Making of American Foreign Policy, PO 348--Urban Politics, and PO 371--Ideology and World Affairs.

IV POLITICAL SCIENCE (Course Prefix PO)

INTRODUCTION TO POLITICS

101 An analysis of the development of ideologies and authority structures. Particular consideration is given to the methodological tools of analysis. 3 sh. (Fall, Spring).

INTRODUCTION TO AMERICAN POLITICS

111 The functions and structures of American national politics with special emphasis on political parties, public opinion and the executive, legislative and judicial processes. 3sh. (Fall, Spring).

POLITICS OF DEVELOPING AREAS

209 Introduction to the study of modernization with comparative analysis of the theories of political development. 3sh. (Fall, 1973).

COMPARATIVE EUROPEAN POLITICS

211 A study of the structure and function of the political system of selected modern European governments. A behavioral-functional approach rather than the

traditional - institutional method will be used. Minton. 3sh. (Fall).

MIDDLE EASTERN POLITICS

212 The Middle East examined as a problem area in international politics. Emphasis on problems of Arab unity, nationalism, economic modernization of selected countries. 3sh. (By demand).

LATIN AMERICAN POLITICS

213 Comparative government and institutions in leading countries of Latin America with emphasis on political and constitutional development. 3sh. (By demand).

INTRODUCTION TO INTERNATIONAL RELATIONS

216 The course covers the basic approaches to international politics and uses the systemic method to examine the pattern of behavior among international political units. Pho. 3sh. (Spring, 1973).

STATE GOVERNMENT

225 Study of the structure, function and administration of state governments: development of state constitutions; the place of the states in the federal system; the political process; legislative, executive, and judicial branches; state finances and administrative departments. 3sh. (Fall).

MUNICIPAL GOVERNMENT

226 A study of the structure, functioning, and administration of urban governments and their relationship to other units of government. Emphasis is on metropolitan areas and their problems. 3sh. (By demand).

AMERICAN POLITICAL THOUGHT

238 An examination of selected political ideas and concepts with particular emphasis upon their development within the American cultural context. Denning. 3 sh. (Spring, 1973).

THE AMERICAN PRESIDENCY

- 241 A study of the role of the President in the American political system. Specific attention is given to the historical development of the office of the chief executive. Minton. 3sh. (Fall, 1972).

AMERICAN POLITICAL PARTIES AND INTEREST GROUPS

- 242 Origin, growth, organization and functions of pressure groups and political parties in the U.S. 3sh. (By demand).

THE AMERICAN CONGRESS

- 243 A study of the legislative process, including the historical and constitutional role of Congress; composition and organization; relation to the executive and judicial branches; external pressures; investigatory role; proposed re-organization. 3sh. (By demand).

HISTORICAL DEVELOPMENT OF NATIONALISM

- 252 A survey of the growth of nationalist ideas in Europe and an analysis of the problems of national development in the non-western world since World War II. Matthieson. 3sh. (Spring, 1973).

HISTORY OF SOCIALISM

- 253 The growth of the socialist movement from the utopian socialist thinkers of the early 19th century through the socialist, anarchist, and communist mass-movements of the 20th century. Mattheisen. 3 sh. (Fall, 1973).

MODERN POLITICAL THEORY

- 282 A detailed examination of three modern political ideologies: communism, democracy, and fascism. Attention is also given to the ideologies of developing nations as well as to the new left. Denning. 3 sh. (Spring, 1974).

ORIGINS AND DEVELOPMENT OF AMERICAN POLITICAL PARTIES

- 322 This course examines the development of both formal and informal political institutions as well as the forces which have shaped them. Topics considered are the growth of political parties, Jeffersonian and Jacksonian influences, sectionalism and the break-down of the political system, and the political effects of expansion, industrialization, immigration, and urbanization. Bergeron. 3sh. (Spring, 1974).

POLITICAL BEHAVIOR AND METHODOLOGY

- 324 An examination of types of political behavior. A comparative approach will be used to indicate behavior patterns and their political influence. Attention will be given to the various methods of political analysis. Minton. 3sh. (Spring).

THE MAKING OF AMERICAN FOREIGN POLICY

- 336 A study of the process of American foreign policy in the contemporary world. The case study method will be used to illustrate problems of strategy and tactics in such areas as Europe, Latin America, Africa, and the Near and Far East. Bergeron. 3sh. (Spring, 1973).

PUBLIC ADMINISTRATION

- 356 A study of bureaucratic behavior in modern society. The course covers bureaucracy in process, with particular emphasis on bureaucratic authority, social change and democracy. Pho. 3sh. (Spring, 1973).

COMPARATIVE PUBLIC POLICY

- 358 Analyses of the constitutional socio-demographic and political backgrounds of selected contemporary public issues and policies. 3sh. (By demand).

POLITICS OF THE FAR EAST

- 363 Recent development of governmental institutions, parties, and ideologies in Communist China and Japan. Emphasis on processes of nation-building and foreign policy formulation in the post-World War II period. Pho. 3sh. (Fall, 1973).

SOUTH EAST ASIAN POLITICS

- 365 Systematic analysis of Southeast Asian countries including Burma, Indonesia, Vietnam and the Philippines. Examination of the anti-colonial movements and the patterns of nation-building in the post colonial period. Pho. 3sh. (Fall, 1972).

COMPARATIVE AFRICAN POLITICS

- 366 Systematic study of modern Africa with special emphasis on the impact of colonization and political development. 3sh. (By demand).

IDEOLOGY AND WORLD AFFAIRS

- 371 An examination of the ideologies of the twentieth century; nationalism, fascism, communism, and their conflicts with liberal democracy. Goler. 3 sh. (By demand).

INTRODUCTION TO CLASSICAL POLITICAL THOUGHT

- 372 Origin and development of state and political thought from works of Greek, Roman, and Medieval political philosophers. 3 sh. (By demand).

MARXIST POLITICAL THOUGHT

- 375 The origin and development of Marxist theory and the revision of economic determinism by recent philosophers. 3 sh. (By demand).

SOVIET POLITICS

- 386 An analysis of influences in the formation of the Soviet political system. The role of the

elite, the Communist Party, the government, and mass organizations will be given special emphasis. Minton. 3 sh. (Spring, 1974).

BRITISH POLITICS

- 391 The tradition of modernity in British political processes and institutions with special emphasis on constitutional development. 3 sh. (By demand).

INTERNATIONAL ORGANIZATION AND INTERNATIONAL LAW

- 401 Territory and jurisdiction of states, treaties and law, and the development of international organization, particularly the United Nations. 3 sh. (By demand).

THEORIES OF INTERNATIONAL POLITICS

- 402 Analysis of recent research tools and methodologies for the study of international politics. 3 sh. (By demand).

READING SEMINAR IN POLITICAL SCIENCE

- 421 An intensive study of an area of political research. In addition to familiarizing the student with the pertinent literature in the field, the student will be expected to read, analyze, and discuss a book or topic each week. Prerequisite: Permission of instructor. 3 sh. (By demand).

RESEARCH SEMINAR IN POLITICAL SCIENCE

- 432 Original research and wide reading in the secondary materials leading to the writing of a major research paper based on methodological techniques. Prerequisite: Permission of instructor. 3 sh. (By demand).

DIRECTED STUDIES IN POLITICAL SCIENCE

- 491 Through frequent consultation with the instructor, the student will investigate and

define a problem of research, the results to be presented in a significant paper. Prerequisite: Permission of instructor. 3 sh. (By arrangement).

ADVANCED TUTORIAL IN POLITICAL SCIENCE

495 A program of directed studies in which the advanced student develops an evaluative and critical essay. The purpose is to sharpen and refine techniques for scholarly research and presentation. This course may not be offered in place of the required seminar course. Prerequisite: Demonstrated proficiency in an area selected for directed studies and permission of instructor. 3 sh. (By arrangement).

PRACTICUM IN POLITICAL SCIENCE

496 A program of study and research stressing (444) involvement in and first-hand knowledge and observation of the political life and relationships of national, state, or local institutions and actors. The purpose is to acquaint the student in a direct way with the actual operation of political institutions and the behavior of political actors. Specific requirements will vary, depending upon the nature of the program undertaken by the student. Required of all political science majors with the exception of those enrolled in teacher-education programs. 3 sh. (By arrangement).

Special reference is made to PH 282--Political Theory: Plato-Marcuse, which may be credited to the Social Science minor or to the Political Science concentration.





LANGUAGES

Joseph Garreau, Chairman
Department of Languages

The Department of Languages offers major concentrations in French and Spanish leading to the Bachelor of Arts degree. Supporting concentrations in French and Spanish are also offered by the Department for students who can arrange second concentrations. The Department also offers minor areas of study in French, German, and Spanish. In cooperation with the Department of History and Political Science and the Department of Philosophy, the Department of Languages also offers a minor area of study in Classical Civilization.

French Concentration

A concentration in French provides a broad, liberal-arts education for students interested in developing a proficiency in the French language, a broad knowledge of the cultural and literary heritage of French civilization, and a basic insight into the function of verbal symbols in the process of human thought. This major provides students with sufficient preparation for language teaching and bi-lingual education and for business and social service careers requiring a command of the French language. A student may combine the French concentration with other supporting studies and may tailor his undergraduate program to meet his individual career objectives.

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Concentrators in French (both the major degree concentration and the supporting second concentration) consist of 33-45 hours of course work and must include the following:

1. FR 241-242--Intensive French
2. FR 251-252--Advanced French Conversation
3. FR 351-352--Advanced French Composition
4. FR 321-322--Cultural Background and Survey of French Literature
5. FR 491--Directed Studies in French Literature
6. Two courses at the "400" level

Additional course work beyond the prescribed courses may be elected from the

French offerings of the Department to a maximum of 45 hours. All concentrators in French must have acquired an active command of the language by the end of their sophomore year and accordingly must initiate their language studies in the freshman year.

Students intending to pursue teaching careers at the elementary or secondary level may apply to appropriate teacher-education programs at the end of their sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for Education. Students who anticipate application to the program in Elementary Education should consult the "Course of Study for Elementary Education and French" and plan their programs accordingly. French concentrators who plan to apply for the Secondary Education program in Language Education should consult the "Curriculum Requirements for Secondary Education Programs" and the Director of Language Education to insure that necessary prerequisite course work has been undertaken prior to the specified application dates. Students planning to teach at the elementary or secondary level are also required to take FR 372--Applied Linguistics and FR 397 or 398--Language Laboratory Practicum. French concentrators who plan to teach in the secondary schools are advised to take a minor area of study in Spanish to enhance their opportunities for job placement.

Students transferring to the College and wishing to concentrate in French must make individual arrangements with the Chairman of the Department of Languages regarding satisfaction of underclass requirements.

Spanish Concentration

A concentration in Spanish provides a broad, liberal-arts education for students interested in developing a proficiency in the Spanish language, a broad knowledge of the cultural and literary heritage of Spanish and Latin-American civilization, and a basic insight into the function of verbal symbols in the process of human thought. This major provides students with sufficient preparation for language teaching and bi-lingual education and for business and social service careers requiring a command of the Spanish language. A student may combine the Spanish concentration with other supporting studies and may tailor his undergraduate program to meet his individual career objectives. Especially attractive options are (1) Spanish and Elementary Education for students who wish to qualify for employment under the General Laws of the Commonwealth

concerning bi-lingual education and (2) Spanish and Sociology for students who wish public service careers in governmental agencies. A concentration in Spanish (both the major degree concentration and the supporting second concentration) consists of 33-45 hours of course work and must include the following:

1. SP 241-242--Intensive Spanish
2. SP 251-252--Advanced Spanish Conversation
3. SP 351-352--Advanced Spanish Composition
4. SP 321-322--Cultural Background and Survey of Spanish Literature
or
SP 331-332--Cultural Background and Survey of Latin-American Literature
5. SP 491 or 492--Directed Studies
6. Two courses at the "400" level

Additional course work beyond the prescribed courses may be elected from the Spanish offerings of the Department to a maximum of 45 hours. All concentrators in Spanish must have acquired an active command of the language by the end of their sophomore year and accordingly must initiate their language studies in the freshman year.

197

Students intending to pursue teaching careers at the elementary or secondary levels may apply to appropriate teacher-education programs at the end of their sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for Education. Students who anticipate application to the program in Elementary Education should consult the "Course of Study for Elementary Education and Spanish" and plan their programs accordingly. Spanish concentrators who plan to apply for the Secondary Education program in Language Education should consult the "Curriculum Requirements for Secondary Education Programs" and the Director of Language Education to insure that necessary prerequisite course work has been undertaken prior to the specified application dates. Students planning to teach at the elementary or secondary level are also required to take SP 372--Applied Linguistics and SP 397 or 398--Language Laboratory Practicum. Spanish concentrators who plan to teach in the secondary schools are advised to take a minor area of study in French to enhance their opportunities for job placement.

Students transferring to the College and wishing to concentrate in Spanish must make individual arrangements with the Chairman of the Department of Languages regarding satisfaction of underclass requirements.

Minor Areas of Study

Minor areas of study consist of 18-24 hours of course work and are offered in the following fields: French, German, Spanish, and Classical Civilization. At least 6 hours must be taken in course work at the "300" level or above in fulfilling the requirements for each of these minor areas. Beginning courses in language at the "100" level may not be credited to language minors. Minors in French, German, and Spanish must include courses in both language and literature. The Department recommends that students elect 6-12 hours in language areas and 6 hours in literature areas at the "300" or "400" levels.

Course work for a minor area of study in Classical Civilization is selected in consultation with Dr. Bentas from the following course offerings of the College:

HI 101, 225, 226, 261, 378; CL 251, 252, 351, 352, 451, 452; PH 251;
GK 101, 102, 201, 202, 301, 302; LA 101, 102, 201, 202, 301, 302.

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Course work for the Classical Civilization minor must be distributed in three areas with at least 9 hours in one area, 6 hours in a second area, and 3 hours in a third area. Although course work in Latin or Greek is not required for the minor, students are urged to complete at least 6 hours of the minor in a classical language at the intermediate level.

DEPARTMENTAL COURSE OFFERINGS:

I FRENCH (Course Prefix FR)

BEGINNING FRENCH I *

101 This course is concerned with the development of fundamental skills in reading, aural comprehension, and controlled oral expression. Class instruction is supplemented by required laboratory work. This course is designed for students who have had no previous experience with French, and no student who has taken French in high school may be enrolled for credit. Brovender. 3sh. (Fall.).

BEGINNING FRENCH II *

102 A continuation of FR 101, which is a prerequisite. Brovender. 3sh. (Spring).

INTERMEDIATE FRENCH I *

211 A review of French grammar and syntax with emphasis upon increased proficiency in reading, aural comprehension and oral expression. Class instruction is supplemented by required laboratory work. This course is intended for students who have completed two years of high school French, preferably during their junior and senior years, for students who have completed FR

102, and or for students who are unqualified for the 221-222 sequence. Members of the Department. 3sh. (Fall).

INTERMEDIATE FRENCH II *

212 A continuation of FR 211, which is a prerequisite, with emphasis upon continued development of comprehension and conversational skills. Members of the Department. 3sh. (Spring).

READING AND CONVERSING IN FRENCH I

221 The basic emphasis of this course is upon French grammar review and the development of reading and conversational skills. Selected contemporary masterpieces provide the basis for developing comprehension, conversational, and composition skills. This course is intended for students with a solid foundation in the French language which has been gained from at least three years of high school study immediately prior to admission to the College. Members of the Department. 3sh. (Fall).

READING AND CONVERSING IN FRENCH II

222 A continuation of FR 221, which is a prerequisite, with emphasis upon continued development of reading and conversational skills. Members of the Department. 3sh. (Spring).

SPOKEN FRENCH I

231 Intensive instruction and practice in conversational French. This course is recommended for students who have completed four years of high school French immediately prior to their admission to the College and who wish to satisfy the language requirement of a department with a course

which emphasizes supervised French conversation on topics of everyday interest. The course is also recommended for students who have been granted credit for intermediate language proficiency but who wish further practice in idiomatic French conversation. Garreau. 3sh. (By demand).

SPOKEN FRENCH II

232 A continuation of FR 231, which is a prerequisite, with emphasis upon continued development of idiomatic conversational ability. Garreau. 3sh. (By demand).

INTENSIVE FRENCH I

241 Intensive practice of difficult grammatical and syntactic problems. Structural review of intermediate level difficulties through a workbook for self-checking at home. Course limited to French concentrators. Prerequisite: three years of high school French or equivalent. Five hours of contact weekly. Brovender. 3sh. (Fall).

INTENSIVE FRENCH II

242 A continuation of FR 241. Practice in the development of the aural and oral language skills coupled with a continued stress of structural review. Prerequisite: FR 241 or permission of instructor. Five hours of contact weekly. Brovender. 3sh. (Spring).

ADVANCED FRENCH CONVERSATION I

251 Advanced training in rapid and idiomatic French speech. Topics of contemporary significance will be selected from contemporary writing. Course limited to French concentrators and to others with

* Beginning and intermediate language courses at the 101-102 and 211-212 levels must be elected for two consecutive semesters and in the prescribed sequences. College credit may not be granted for one semester of such courses unless exception is permitted by the Chairman of the Department of Languages on the basis of student placement in a more advanced language course.

permission of the instructor. Hancock. 3sh. (Fall).

ADVANCED FRENCH CONVERSATION II

252 A continuation of FR 251, which is a prerequisite. Hancock. 3sh. (Spring).

CULTURAL BACKGROUND AND SURVEY OF FRENCH LITERATURE I

321 A survey of French literature based on the (261, history and civilization of France from the 271) middle ages to 1800. 3 sh. (Fall).

CULTURAL BACKGROUND AND SURVEY OF FRENCH LITERATURE II

322 A survey of French literature based on the (262, history and civilization of France from 1800 272) to the present. 3 sh. (Spring).

ADVANCED FRENCH COMPOSITION I

351 This course is designed to give advanced students and prospective teachers of French a grasp of stylistics and to foster the development of individual style through the analysis of illustrative texts from the masters and through exercises in free composition. Conducted in French. Brovender. 3sh. (Fall).

ADVANCED FRENCH COMPOSITION II

352 A continuation of FR 351 with emphasis upon French "explication de textes." Brovender. 3sh. (Spring).

APPLIED LINGUISTICS

372 Linguistic analysis of French phonology, morphology, and syntax, with a systematic comparison of the structures of French and English. Required for prospective teachers of French in the elementary and secondary schools. Bousquet. 3sh. (Spring).

LANGUAGE LABORATORY PRACTICUM I

397 Through observation and participation in the

language laboratory of the College, the prospective teacher of French becomes familiar with the materials and teaching-learning situation of the foreign language media center. Aste. 1sh. (Fall).

LANGUAGES LABORATORY PRACTICUM II

398 A continuation of FR 397, which is not a prerequisite. Aste. 1sh. (Spring).

SELECTED AUTHORS

401 An intensive study of works by a few French authors. 3 sh. (By demand).

SELECTED AUTHORS

402 An intensive study of works by a few French French authors. Not a continuation or repetition of FR 401. 3 sh. (By demand).

REASON AND SENTIMENT IN 18th CENTURY FRENCH LITERATURE

403 A study of the parallel trends of reason and sentiment in the works of Diderot, Voltaire, Rousseau, Marivaux, and Beaumarchais. An inquiry into the social function of art, the definition of the newly emerging esthetics, and the concept of happiness. Prerequisite: Permission of instructor. Conducted in French. Hancock. 3sh. (Fall, 1972).

FROM BAUDELAIRE TO SURREALISM

405 The debt of the major 20th century French poets (Celaud, Peguy, Valery, Apollinaire, Elaud, Arogon, and Michaux) to Baudelaire, Rimbaud, the Symbolists, and Mallarme. Prerequisite: Permission of instructor. Conducted in French. Hancock. 3 sh. (Fall, 1973).

THEATRE AND ANTI-THEATRE

422 The 20th century modern French theater considered as an experimentation into new dramatic forms and as a metaphorical expression of a new vision of life. Plays from major writers (Celaud, Giraudoux, Anouilh,

Sartre, Camus, Beckett, Genet, and Ionesco) will be analyzed. Conducted in French. Prerequisite: Permission of instructor. Hancock. 3sh. (Spring, 1973).

THE NOUVEAU ROMAN

- 432 An examination of the techniques and procedures of the French alliterature of the 50's and 60's, with particular reference to Beckett, Butor, Robbe-Grillet, Sarraute, and Simon. Conducted in French. Prerequisite: Permission of instructor. Bousquet. 3sh. (Spring, 1974).

SEMINAR IN MALRAUX AND UNAMUNO

- 452 A comparative study of the major philosophical and literary works of Malraux and Unamuno. Prerequisite: French concentrators with junior or senior standing and others with permission of instructors. Garreau and Mendicoa. 3 sh. (By demand).

TECHNIQUES OF LITERARY ANALYSIS

- 454 Thematic and linguistic analyses of major French prose and poetry of the 19th and 20th centuries. Prerequisite: French concentrators with junior or senior status and others with permission of instructor. Conducted in French. Hancock. 3sh. (Spring, 1974).

FRENCH MUSIC AND MUSICIANS

- 462 French music and musicians from Lully to the present. Conducted in French, with discussions based on readings and recorded music. Prerequisite: French concentrators with junior or senior status and others with permission of instructor. Bousquet. 3 sh. (Spring, 1973).

DIRECTED STUDIES IN FRENCH LITERATURE

- 491 Individual research projects for French concentrators. The student through regular and frequent consultation with his instructor develops a course of directed study in French literature and defines a problem for individual research. The student's findings are presented in a paper of significant proportions. Prerequisite: Permission of instructor. 3 sh. (By arrangement).

DIRECTED STUDIES IN COMPOSITION

- 492 The student through regular and frequent consultation with his instructor pursues a special problem of composition or creative expression. 3 sh. Prerequisite: Permission of instructor. (By arrangement).

ADVANCED TUTORIAL IN FRENCH

- 495 A program of directed studies which affords the advanced student with an additional opportunity to pursue a previously explored problem in greater depth or to initiate an additional problem. The purpose is to sharpen and refine techniques for scholarly research and presentation and for creative expression. Prerequisite: Demonstrated proficiency in an area selected for directed studies and permission of instructor. 3 sh. (By arrangement).

201

II GERMAN (Course Prefix GM)

BEGINNING GERMAN I *

- 101 This course is concerned with the development of fundamental skills in reading,

*Beginning and intermediate language courses at the 101-102 and 211-212 levels must be elected for two consecutive semesters and in the prescribed sequences. College credit may not be granted for one semester of such courses unless exception is permitted by the Chairman of the Department of Languages on the basis of student placement in a more advanced language course.

aural comprehension, and controlled oral expression. Class instruction is supplemented by required laboratory work. This course is designed for students who have had no previous experience with German, and no student who has taken German in high school may be enrolled for credit. Smith, Wunderlich. 3sh. (Fall).

BEGINNING GERMAN II *

102 A continuation of GR 101, which is a prerequisite. Smith, Wunderlich. 3sh. (Spring).

INTERMEDIATE GERMAN I *

211 A review of German grammar and syntax with emphasis upon increased proficiency in reading, aural comprehension, and oral expression. Class instruction is supplemented by required laboratory work. This course is intended for students who have completed two years of high school German, preferably during their junior and senior years, or GM 102. Wunderlich. 3 sh. (Fall).

INTERMEDIATE GERMAN II *

212 A continuation of GR 211, which is a prerequisite, with emphasis upon continued development of comprehension and conversational skills. Wunderlich. 3sh. (Spring).

ADVANCED GERMAN I

251 Advanced training in rapid and idiomatic German speech and writing supplemented by required laboratory work and study of selected masterpieces of German literature. Required course for German minor. Prerequisite: GM 212 or equivalent. Wunderlich. 3sh. (Fall).

ADVANCED GERMAN II

252 A continuation of GM 251, which is a prerequisite, with emphasis upon continued development of comprehension and conversational skills. Course work is supplemented by required laboratory work and study of selected masterpieces of German literature. Required course for German minor. Wunderlich. 3sh. (Spring).

CULTURAL BACKGROUND OF GERMAN LITERATURE I

301 The cultural and artistic achievements of the German nation from the middle ages to the present and their import for major trends and developments in German literature. This course is supplemented by visual aids. Conducted in German and English. Wunderlich. 3 sh (By demand).

CULTURAL BACKGROUND OF GERMAN LITERATURE II

302 A continuation of GM 301, which is a prerequisite, with emphasis upon contemporary trends. Conducted in German and English. Wunderlich. 3 sh. (By demand).

GERMAN LITERATURE TO 1800

311 An historical survey of German literature to 1800, with emphasis upon major literary movements from the middle ages to romanticism. Conducted in German and English. Wunderlich. 3 sh. (By demand).

GERMAN LITERATURE SINCE 1800

312 A continuation of GM 311, which is a prerequisite. Historical survey of German literature from romanticism to the present. Conducted in German and English. Wunderlich. 3 sh. (By demand).

* Beginning and intermediate language courses at the 101-102 and 211-212 levels must be elected for two consecutive semesters and in the prescribed sequences. College credit may not be granted for one semester of such courses unless exception is permitted by the Chairman of the Department of Languages on the basis of student placement in a more advanced language course.

LANGUAGE LABORATORY PRACTICUM I

- 397 Through observation and participation in the language laboratory of the College, the prospective teacher of German becomes familiar with the materials and teaching-learning situation of the foreign language media center. Aste. 1sh. (Fall).

LANGUAGE LABORATORY PRACTICUM II

- 398 A continuation of GM 397, which is not a prerequisite. Aste, 1sh. (Spring).

HISTORY AND DEVELOPMENT OF THE GERMAN LANGUAGE

- 402 Examines the German language from an historical perspective as a basis for understanding the German language as it is now spoken and written. Studies the origin and development of German through phonetic, lexical, syntactical, and semantic shifts in the language from its beginnings to the present. Prerequisite: Permission of instructor. Wunderlich. 3 sh. (By demand).

III GREEK (Course Prefix GK)

BEGINNING GREEK I *

- 101 No previous knowledge of Greek required. The aims are basic oral expression, aural comprehension, and elementary reading and writing, in modern and ancient Greek. Bentas. 3sh. (Fall).

BEGINNING GREEK II *

- 102 Continuation of GK 101, with readings in Greek prose and poetry. A good foundation for advanced study in modern or classical Greek. Prerequisite: GK 101, or equivalent, and permission of instructor. Bentas. 3sh. (Spring).

INTERMEDIATE GREEK I *

- 211 Review and development of audio-lingual skill, writing, and reading in Greek, followed by the reading of Greek texts from the classical, Byzantine, and modern periods. Prerequisite: GK 101-102, or equivalent, and permission of instructor. Bentas. 3sh. (Fall, 1971).

INTERMEDIATE GREEK I *

- 212 Continuation of GK 211. Bentas. 3 sh. (Spring, 1972).

GREEK CLASSICS I

- 301 Concentrated readings in such authors as Homer, Herodotus, Xenophon, Plato and the dramatists. Prerequisite: GK 212, or equivalent, and permission of instructor. Three hours a week. Bentas. 3sh. (By demand).

GREEK CLASSICS II

- 302 Continuation of Greek 301. Prerequisite: GK 212, or equivalent, and permission of instructor. Bentas. 3sh. (By demand).

IV ITALIAN (Course Prefix IT)

BEGINNING ITALIAN I *

- 101 This course is concerned with the development of fundamental skills in reading, aural comprehension, and controlled oral expression. Class instruction is supplemented by required laboratory work. This course is designed for students who have had no previous experience with Italian, and no student who has taken Italian in high school may be enrolled for credit. Aste. 3sh. (Fall).

* Beginning and intermediate language courses at the 101-102 and 211-212 levels must be elected for two consecutive semesters and in the prescribed sequences. College credit may not be granted for one semester of such courses unless exception is permitted by the Chairman of the Department of Languages on the basis of student placement in a more advanced language course.

BEGINNING ITALIAN II *

102 A continuation of IT 101, which is a prerequisite. Aste. 3sh. (Spring).

INTERMEDIATE ITALIAN I *

211 A review of Italian grammar and syntax with emphasis upon increased proficiency in reading, aural comprehension, and oral expression. Class instruction is supplemented by required laboratory work. This course is intended for students who have completed two years of high school Italian, preferably during their junior and senior years or IT 102. Aste. 3sh. (Fall).

INTERMEDIATE ITALIAN II *

212 A continuation of IT 211, which is a prerequisite, with emphasis upon continued development of comprehension and conversational skills. Aste. 3sh. (Spring).

PIRANDELLO: HIS THEATER AND INFLUENCE

375 A course devoted to the major dramatic works of Pirandello which have established his reputation as an entertainer and a social critic, with special emphasis upon his notion of appearance vs. reality and his influence upon contemporary French drama. May be counted for literature requirement or for Area II (Humanities) requirement. Does not satisfy departmental language requirements. Conducted in English with readings in English translation. Aste. 3sh. (Fall).

DANTE'S DIVINE COMEDY

376 A detailed study of the Divine Comedy. Consideration is given to the influence of Dante's minor works, to the unity of the poem as a synthesis of Dante's new life," and to

Dante's views of the world and history. May be counted for the literature requirement or for Area II (Humanities) requirement. Does not satisfy departmental language requirements. Conducted in English with readings in English translation. Aste. 3sh. (Spring).

V LATIN (Course Prefix LA)

BEGINNING LATIN I *

101 A course for beginners and for students wishing to review the elements of Latin, and to acquire, thereby, an ability to read selected passages from Latin authors. Aste. 3sh. (Fall).

BEGINNING LATIN II *

102 Continuation of LA 101, with special attention devoted to the translation, analysis and class discussion of selected passages from Latin authors, illustrating the life, culture, and contribution of ancient Rome to the modern world. Aste. 3sh. (Spring).

INTERMEDIATE LATIN I *

211 Readings from Latin prose and poetry, with special attention to the works of such authors as Cicero and Vergil. Prerequisite: LA 101-102. Bentas. 3sh. (Fall).

INTERMEDIATE LATIN II *

212 Continuation of LA 211. Bentas. 3sh. (Spring).

LATIN CLASSICS I

301 Concentrated readings in such authors as Livy, Tacitus, Horace, Juvenal, Catallus, Ovid, and Medieval Latin writers. Prerequisite: LA 201-202, or four years of high school Latin. Three hours a week. Bentas. 3sh. (By demand).

Beginning and intermediate language courses at the 101-102 and 211-212 levels must be elected for two consecutive semesters and in the prescribed sequences. College credit may not be granted for one semester of such courses unless exception is permitted by the Chairman of the Department of Languages on the basis of student placement in a more advanced language course.

LATIN CLASSICS II

302 Continuation of LA 301. Bentas. 3sh. (By demand).

SELECTED LATIN AUTHORS

303 Intensive study of a few author's works not previously studied. May be repeated for credit with approval of instructor. Bentas. 3 sh. (By demand).

VI SPANISH (Course Prefix SP).

BEGINNING SPANISH I *

101 This course is concerned with the development of fundamental skills in reading, aural comprehension, and controlled oral expression. Class instruction is supplemented by required laboratory work. This course is designed for students who have had no previous experience with Spanish, and no student who has taken Spanish in high school may be enrolled for credit. Cuan, Sanz. 3sh. (Fall).

BEGINNING SPANISH II *

102 A continuation of SP 101, which is a prerequisite. Cuan, Sanz. 3sh. (Spring).

CONVERSATIONAL SPANISH FOR HEALTH PROFESSIONS

103 Fundamental skills in conversation for the health professions (semi-technical functional vocabulary, idiomatic expressions used by patients and doctors, and situational phrases for the health professions) with special emphasis upon those cultural and psychological characteristics of Spanish speaking peoples which influence their behavior in a health profession milieu. 3 sh. (By demand).

INTERMEDIATE SPANISH I *

211 A review of Spanish grammar and syntax with emphasis upon increased proficiency in reading, aural comprehension, and oral expression. Class instruction is supplemented by required laboratory work. This course is intended for students who have completed two years of high school Spanish, preferably during their junior and senior years, for students who have completed SP 102, and or for students who are unqualified for the 221-222 sequence. Saitz, Sanz, Vazquez. 3sh. (Fall).

INTERMEDIATE SPANISH II *

212 A continuation of SP 211, which is a prerequisite, with emphasis upon continued development of comprehension and conversational skills. Saitz, Sanz, Vasquez. 3sh. (Spring).

FIELDWORK IN THE SPANISH COMMUNITY

213 Individual assignments under the sponsorship of local service agencies serving the Spanish speaking community, involving individual family, and group contact. Written and oral reports in Spanish. Prerequisite or corequisite: SP 212 or equivalent. 3 sh. (By arrangement).

READING AND CONVERSING IN SPANISH II

221 The basic emphasis of this course is upon Spanish grammar review and the development of reading and conversational skills. Selected contemporary masterpieces provide the basis for developing comprehension, conversational, and composition skills. This course is intended for students with a solid foundation in the Spanish language which has been gained

* Beginning and intermediate language courses at the 101-102 and 211-212 levels must be elected for two consecutive semesters and in the prescribed sequences. College credit may not be granted for one semester of such courses unless exception is permitted by the Chairman of the Department of Languages on the basis of student placement in a more advanced language course.

from at least three years of high school study immediately prior to admission to the College. Mendicoa. 3sh. (Fall).

READING AND CONVERSING IN SPANISH II

222 A continuation of SP 221, which is a prerequisite, with emphasis upon continued development of reading and conversational skills. Mendicoa. 3sh. (Spring).

INTENSIVE SPANISH I

241 Intensive practice of difficult grammatical and syntactical problems with special techniques to increase the rate of development of reading skills. Special attention is given to communicative activities. Intensive language laboratory work is recommended twice weekly. Structured review of intermediate level difficulties through a workbook for self-checking practice at home. Prerequisite: three years of high school Spanish or equivalent. Saitz. 3sh. (Fall).

INTENSIVE SPANISH II

242 A continuation of SP 241, which is a prerequisite. Continued practice in the development of the aural and oral language skills plus continued review of structure. Saitz. 3sh. (Spring).

ADVANCED SPANISH CONVERSATION I

251 Advanced training in rapid and idiomatic Spanish speech. Stress on original production through class discussion and guided compositions. Fables, short poems, essays, excerpts from plays and novels, and selections from periodicals will provide an introduction to the literary styles of Spain and Latin-America. Saitz. 3sh. (Fall).

ADVANCED SPANISH CONVERSATION II

252 A continuation of SP 251, which is a prerequisite. Saitz. 3sh. (Spring).

CULTURAL BACKGROUND AND SURVEY OF SPANISH LITERATURE I

321 An historical study of the more important cultural and literary movements and authors from the middle ages to romanticism. The unique personality of the Spanish culture from 12th to 18th centuries will be analyzed through its best representative writers. Conducted in Spanish. Required for Spanish concentrators. Prerequisite: Permission of instructor. Mendicoa. 3sh. (By demand).

CULTURAL BACKGROUND AND SURVEY SPANISH LITERATURE II

322 An historical study of the more important literary and cultural movements and authors from romanticism to the present. Topics include realism and the restoration, modernism and the influence of Ruben Dario, the generation of "98" and the search for Spain's authenticity, Juan Ramon Jimenez and the generation of "27", Lorca and the generation of "36," the Spanish Civil War and its literary impact, the post-war generation and present day literary expression. Conducted in Spanish. Required for Spanish concentrators. Prerequisite: Permission of instructor. Mendicoa. 3sh. (By demand).

CULTURAL BACKGROUND AND SURVEY OF LATIN-AMERICAN LITERATURE I

331 An historical study of the more important cultural and literary movements and writers from the colonial period to the end of the 19th century. The growth and development of the Latin-American society will be analyzed through its more representative writers. Conducted in Spanish. Required for Spanish concentrators. Prerequisite: Permission of instructor. Vazquez. 3sh. (Fall).

CULTURAL BACKGROUND AND SURVEY OF LATIN-AMERICAN LITERATURE II

332 A continuation of SP 331, which is a prerequisite. Special emphasis will be put on the new literary and cultural tendencies of the Latin-American nations as they struggle

economically, politically, and sociologically in search of an individual identity. Conducted in Spanish. Required for Spanish concentrators. Vazquez. 3sh. (Spring).

ADVANCED SPANISH COMPOSITION I

351 This course is designed to give advanced students and prospective teachers of Spanish a grasp of stylistics and to foster the development of individual style through the analysis of illustrative texts from the masters and through exercises in free composition. Conducted in Spanish. Mendicoa. 3sh. (Fall).

ADVANCED SPANISH COMPOSITION II

352 A continuation of SP 351, which is a prerequisite, with emphasis upon the basic concepts, criteria, and techniques of literary analysis. Conducted in Spanish. Mendicoa. 3sh. (Spring).

APPLIED LINGUISTICS

372 Linguistic analysis of Spanish phonology, morphology, and syntax, with a systematic comparison of the structures of Spanish and English. Required for prospective teachers of Spanish in the elementary and secondary schools. Bousquet. 3sh. (Spring).

LANGUAGE LABORATORY PRACTICUM I

397 Through observation and participation in the language laboratory at the College, the prospective teacher of Spanish becomes familiar with the materials and teaching-learning situation of the foreign language media center. Aste. 1sh. (Fall).

LANGUAGE LABORATORY PRACTICUM II

398 A continuation of SP 397, which is not a prerequisite. Aste. 1sh. (Spring).

SELECTED AUTHORS

401 An intensive study of works by a few Spanish and / or Latin American authors. 3 sh. (By demand).

SELECTED AUTHORS

402 An intensive study of works by a few Spanish and / or Latin American authors. Not a continuation or repetition of SP 401. 3 sh. (By demand).

THE MODERN SHORT STORY

418 A study of modern short stories by Spanish and / or Latin American authors. 3 sh. (By demand).

THE GENERATION OF "98"

405 A critical study of such influential authors as Unamuno, Valle-Inclan, Baroja, Azorin, and Machado. Special emphasis is given to their personal style as a reaction to Spain's decay, as well as to their influence upon the emergence of the modern Spain. Prerequisite: SP 321-322 or permission of instructor. Conducted in Spanish. (By demand).

THE LATIN-AMERICAN NOVEL OF THE 19th AND 20th CENTURIES

416 The evolution of the Latin-American novel from romanticism to the Mexican revolution through four representative masterpieces: romanticism in *Maria* of Jorge Isaac, naturalism in *Dona Barbara* of Romulo Gallegos, the Gauchismo and poetic-prose in *Don Segundo Sombra* of Ricardo Guiraldes, and the "novela de la Revolucion" in *Los de abajo* of Mariano Azuela. The interrelationship of themes, characters, and style will be studied for the purpose of introducing students to the principles of literary criticism. Conducted in Spanish. Prerequisite: SP 331-332 or permission of instructor. Saitz. (By demand).

SEMINAR IN MALRAUX AND UNAMUNO

452 A comparative study of the major philosophical and literary works of Malraux and Unamuno. Prerequisite: Spanish concentrators with junior or senior standing and others with permission of instructors. Garreau and Mendicoa. 3sh. (By demand).

DIRECTED STUDIES IN SPANISH LITERATURE

491 The student through regular and frequent consultation with his instructor develops a course of directed studies in Spanish literature and defines a problem for individual research. The student's findings are presented in a paper of significant proportions. Prerequisite: Permission of instructor. 3sh. (By demand).

DIRECTED STUDIES IN LATIN AMERICAN LITERATURE

492 The student, through regular and frequent consultation with his instructor develops a course of directed studies in Latin American literature and defines a problem for individual research. The student's findings are presented in a paper of significant proportions. Prerequisite: Permission of instructor. 3sh. (By arrangement).

DIRECTED STUDIES IN COMPOSITION

493 The student, through regular and frequent consultation with his instructor pursues a special problem in composition or creative expression. Prerequisite: Permission of instructor. 3sh. (By arrangement).

ADVANCED TUTORIAL IN SPANISH

495 A program of directed studies which affords the advanced student with an additional opportunity to pursue a previously explored problem in greater depth or to initiate an additional problem. The purpose is to sharpen and refine techniques for scholarly research and presentation and for creative expression. Prerequisite: Demonstrated proficiency in an area selected for directed studies and permission of instructor. 3sh. (By arrangement).

VII CLASSICS (Course Prefix CL)

Courses listed under this heading are conducted in English and do not satisfy the

several language requirements of the College.

GREAT BOOKS OF GREECE AND ROME I

251 A study in the meaning and importance of the Greek pagan masterpieces, which are read in the best translations. (Subject to demand of Classical Civilization minors). Bentas. 3sh.

GREAT BOOKS OF GREECE AND ROME II

252 Continuation of CL 251. (Subject to demand of Classical Civilization minors). Bentas. 3sh.

CLASSICAL DRAMA I

351 Group reading of great plays; discussion of their meaning and importance; lectures on the Greek theatre; the origins of tragedy and comedy, the nature of drama, and the special achievements of each dramatist. Prerequisite: consent of instructor. (Subject to demand of Classical Civilization minors). Bentas. 3sh.

CLASSICAL DRAMA II

352 Continuation of Classical Drama I, with concentration on the Roman dramatists. Prerequisite: consent of instructor. (Subject to demand of Classical Civilization minors). Bentas. 3sh.

GREEK THOUGHT

451 The Greek view of man and nature as revealed in myth, philosophy, science, history, art, and literature, and their relation to the modern age. Prerequisite: consent of instructor. (Subject to demand of Classical Civilization minors). Bentas. 3sh.

THE ROMAN MIND

452 The Roman view of man and nature as revealed in law, government, social institutions, legend, and religion, and their relation to the modern world. Prerequisite: consent of Instructor. (Subject to demand of Classical Civilization minor). Bentas. 3sh.





MATHEMATICS

William Malone, Chairman
Department of Mathematics

The Department of Mathematics offers a major concentration in Mathematics leading to the Bachelor of Arts or Bachelor of Science degree and a supporting concentration in Mathematics for students who can arrange a second concentration. The Department also offers a minor area of study in Mathematics.

Mathematics Concentration

A concentration in Mathematics will prove useful for students planning to teach in elementary or secondary schools, to pursue graduate work in mathematics and allied fields, and to enter statistically oriented careers in business and industry. For the well-qualified student in mathematics, favorable employment opportunities have been predicted through this decade. Degree programs of the College permit students to supplement their concentration in Mathematics through related study options in many academic areas and to tailor their undergraduate programs to meet their individual career objectives.

211

Concentrations in Mathematics (both the major degree concentration and the supporting second concentration) consist of 30 to 45 hours of course work and must include the following:

1. MA 201-202--Calculus I and II
2. MA 213--Modern Algebra
3. MA 212--Linear Algebra
4. MA 303-304--Calculus III and IV

Ordinarily, concentrators in Mathematics are expected to initiate their studies with MA 107--Introduction to Calculus or MA 201--Calculus I, but students who think they should develop a higher degree of facility with basic mathematical concepts before undertaking MA 107 or MA 201 may begin their studies with a course from the sequence MA 103--College Algebra through MA 106--Finite Mathematics. All concentrators must present at least 30 hours in courses on or above the "200" level (except that MA 107 may be counted in these 30 hours) and

should initiate such course work with MA 201--Calculus I no later than the first semester of the sophomore year in order to complete concentration requirements within four years.

Students intending to pursue teaching careers at the elementary or secondary level may apply to appropriate teacher-education programs at the end of their sophomore year. Such students are advised that admission to teacher-education programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for Education. Students who anticipate application to the program in Elementary Education should consult the "Course of Study for Elementary Education and Mathematics" and plan their programs accordingly. Mathematics concentrators who plan to apply for the Secondary Education program in Mathematics Education should consult the "Curriculum Requirements for Secondary Education Programs" and the Director of Mathematics Education to insure that necessary prerequisite course work has been undertaken prior to the specified application dates. Students planning to take the teaching program in Mathematics Education are advised to take one course in geometry (MA 307--Modern Geometry or MA 411--Topology) as part of their course work for the concentration.

212

A student who wishes to prepare for graduate work in Mathematics and allied statistical fields is advised to develop a mathematics program which includes at least 6 hours from the following courses: MA 301--Probability, MA 302--Statistics, MA 403--Differential Equations, and MA 405--Elementary Analysis I. MA 406--Elementary Analysis II and MA 411--Topology should also be taken by all students contemplating graduate work in Mathematics since these courses are generally listed as requirements for admission to graduate programs.

Students transferring to the College and wishing to concentrate in Mathematics must make individual arrangements with the Chairman of the Department of Mathematics regarding satisfaction of underclass requirements.

Minor Areas of Study

A minor area of study in Mathematics consists of 18-24 hours of course work selected in consultation with the student's advisor or with the Chairman of the Department. At least 6 hours must be taken in course work at the "300" level or above in fulfilling the requirement for the Mathematics minor.

**DEPARTMENTAL COURSE OFFERINGS:
MATHEMATICS (Course Prefix MA)**

MODERN MATHEMATICS

101 A course designed to cover set theory, number systems, relations, set operations, logic, and order. Copley. 3sh. (Fall, Spring).

COLLEGE ALGEBRA

103 A review of the fundamental algebraic concepts plus a selection of topics from: theory of equations, determinants, probability. Malone. 3sh. (Fall, Spring).

COLLEGE GEOMETRY

104 An axiomatic approach to the fundamentals of Euclidean and non-Euclidean geometry and a comparison of the two through the concept of parallelism. Prerequisite: Secondary school geometry. Portnoy. 3sh. (Spring).

COLLEGE TRIGONOMETRY

105 Angles and their measure, the trigonometric functions, solving triangles, law of sines, law of cosines, circular functions and their graphs, trigonometric identities. Andrusaitis. 3sh. (Fall).

FINITE MATHEMATICS

106 A course giving an introduction to logic, set theory, counting problems, and elementary statistics. 3sh. (Fall, Spring).

INTRODUCTION TO CALCULUS

107 An introductory course covering the real numbers, inequalities, analytic geometry, functions, limits, continuity, and differentiation. Gravina. 3sh. (Fall).

**INTRODUCTION TO THEORY OF
COMPUTER PROGRAMMING**

109 An introduction to the processing of information by computers. Included in this

course will be discussions of computer logic, memory, inputs and outputs, system analysis and programming, time-sharing, transmission of data, information storage and retrieval, and uses. 3sh. (Fall).

CALUCLUS I

201 Topics include applications of the derivative, the differential, anti-differentiation, and the definite integral. Prerequisite: MA 107 or equivalent. Land. 3 sh. (Fall, Spring).

CALCULUS II

202 Topics include applications of the definite integral, logarithmic, exponential, trigonometric and hyperbolic functions, and techniques of integration. Prerequisite: MA 201. 3sh. (Fall).

ELEMENTARY STATISTICAL ANALYSIS

206 A course designed primarily for the social scientist: includes graphic presentations, measures of central tendency, variability, and correlation, standard scores and the unit normal distribution, hypotheses and statistical inference and tests of significance. 3sh. (Fall, Spring).

HISTORY OF MATHEMATICS

207 An investigation of creative mathematics (305) through the lives of mathematicians from classical times to the present. Portnoy. 3sh. (Fall).

THEORY OF EQUATIONS

208 An introduction to the theory of equations, including discussions of complex numbers, algebraic equations and their roots, separation of roots, Strum's theorem, and approximate evaluation of roots. 3sh. (Spring).

**ELEMENTARY COMPUTER
PROGRAMMING**

209 A continuation of MA 109 including flow

charts and applications in software programming utilizing the Fortran programming language. Prerequisite: MA 109. 3 sh. (By demand).

SET THEORY AND LOGIC

212 Introduction to set theory, logic and mathematical reasoning. The essential tools needed to study mathematical structures from the axiomatic point of view will be developed. Number systems and other structures will be studied as illustrations. Primarily for concentrators in mathematics. 3sh. Winslow. (Spring).

MODERN ALGEBRA

213 An introduction to the important structures (407) of modern algebra, including groups, rings, integral domains and fields. Prerequisite: MA 212. Winslow. 3sh. (Fall).

LINEAR ALGEBRA

214

214 A review of the real number system, vector (401) spaces and systems of linear equations, linear transformations and matrices, vector spaces with an inner product and an introduction to determinants. Prerequisite: MA 213. 3sh. (Spring).

PROBABILITY (Calculus Approach)

301 Elementary probability spaces, general probability spaces, random variables, combined random variables, algebra of expectations. Prerequisite: MA 202. 3sh. (Fall).

STATISTICS (Calculus Approach)

302 Random Sampling, law of large numbers, estimation of parameters, central limit theorem, confidence intervals and tests of hypotheses, decision theory, regression, sampling from a normal population, experimental design and analysis of variance. Prerequisite: MA 301. 3sh. (Spring).

CALCULUS III

303 Polar coordinates, conic sections, indeterminate forms, improper integrals and Taylor's formula, infinite series, and an introduction to vector analysis. Prerequisite: MA 202. 3 sh. (Fall, Spring).

CALCULUS IV

304 A continuation of vector analysis, differential calculus of functions of several variables, and multiple integration. Prerequisite: MA 303. 3sh. (Fall).

MODERN GEOMETRY

307 Klein's program; historical approach to (306) various geometries including Euclidean, non-Euclidian, finite, manifold, and Riemannian geometry. Prerequisite: MA 202. Portnoy. 3 sh. (By demand).

OPERATIONS RESEARCH

309 A short review of linear dependence and independence, linear transformations, matrix algebra, eigenvalues and eigenvectors. A brief introduction to probability. Theory of Markov Chains and their application to business, social science, and population genetics. Convex sets, linear programming and the simplex algorithm. The Leontief input-output economic model and game theory. Prerequisite: MA 214. 3 sh. (Fall).

DIFFERENTIAL EQUATIONS

403 Topics include equations of order one, linear differential equations, non-homogeneous equations, geometrical and physical applications, inverse differential operators and the Laplace transform. Prerequisite: MA 303. 3sh. (Fall).

ELEMENTARY ANALYSIS I

405 A modern approach to advanced calculus. Precise formulation of concepts of function,

limit and continuity, compactness in Euclidean spaces, uniform continuity, differentiation and Taylor's theorem in one and several dimensions. Prerequisite: MA 304. 3sh. (Spring, 1974).

ELEMENTARY ANALYSIS II

406 A continuation of MA 405 and covering integration theory, content and outer measure, multiple line and surface integrals, interchange of limits, infinite series and products, and Fourier analysis. Prerequisite: MA 405. 3sh. (Fall, 1975).

TOPOLOGY

411 An introductory course in point-set topology, including a review of sets and functions, metric and topological spaces, treatments of compactness, separation axioms and connectedness. Prerequisite: MA 405. 3sh. (Spring, 1976).

NUMERICAL ANALYSIS

412 Introduction to error analysis, approximation and interpolation theory, numerical differentiation, Gaussian and Newton-Cotes quadrature formulae, and the Euler-Maclaurin sum formula. Prerequisite: MA 405. 3 sh. (Spring, 1976).

NUMBER THEORY

413 A review of the fundamental concepts of the g.c.d., the l.c.m., and the Euclidean algorithm, arithmetic functions, including the Moebius function, Euler function and inversion formulas, congruences and residues, summatory functions, and treatments of the Gaussian integers, the Farey sequences, and the Pell equation. Prerequisite: MA 213. 3 sh. (Fall, 1973).

INTRODUCTION TO COMPLEX VARIABLES

414 Algebra and geometry of complex numbers,

conformal mapping, analytic functions, Cauchy-Riemann equations, Cauchy integral formula, calculus of residues. Prerequisite: MA 303. 3 sh. (Spring, 1973).

DIRECTED STUDIES IN ANALYSIS

491 Individual study for the student desiring more advanced or more specialized work in analysis. May be repeated for a total of 3 semester credits. Course may not be substituted for scheduled offerings. Prerequisite: Permission of instructor. 1-3 sh. (By arrangement).

DIRECTED STUDY IN ALGEBRA

492 Individual study for the student desiring more advanced or more specialized work in algebra. May be repeated for a total of 3 semester credits. Course may not be substituted for scheduled offerings. Prerequisite: Permission of instructor. 1-3 sh. (By arrangement).

DIRECTED STUDY IN GEOMETRY

493 Individual study for the student desiring more advanced or more specialized work in geometry. May be repeated for a total of 3 semester credits. Course may not be substituted for scheduled offerings. Prerequisite: Permission of instructor. 1-3 sh. (By arrangement).

ADVANCED TUTORIAL IN MATHEMATICS

495 A program of directed studies which affords the advanced student with an additional opportunity to pursue a previously explored problem in greater detail or to initiate an additional problem. The purpose is to sharpen and refine techniques for scholarly research and presentation. Prerequisite: Demonstrated proficiency in an area selected for directed studies and permission of instructor. 3 sh. (By arrangement).



MUSIC

Edward Gilday, Chairman
Department of Music

Willis Traphagan, Associate Chairman
Department of Music

Thomas Elliot, Director
Music Specialization Programs
(Bachelor of Music)

Paul Gayzagian, Director
Music Education

Antone Holevas, Director.
Applied Music

Stuart Smith, Advisor
Music Concentration Program
(Bachelor of Arts)

Coordinators: Artin Arslanian, Music Theory Faculty
Everett Beale, Percussion Faculty
Donald Bravo, Woodwind Faculty
Paul Bregor, Music History Faculty
Calvin Lindblad, Piano Faculty
Ivan Oak, Voice Faculty
Natalo Paella, Brass Faculty
William Pordon, String Faculty

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The Department of Music offers a concentration in Music leading to the Bachelor of Arts degree and major specializations in Music Education, Musicology, Music Theory, and Performance leading to the Bachelor of Music degree. The Department also offers a minor area of study in Music History.

Concentration in Music (Bachelor of Arts)

A concentration in Music is offered for the student who has a general interest in Music and allows him considerable flexibility in designing an individual program of studies. Students who pursue the Bachelor of Arts degree in Music must complete a basic program of 30 semester hours of Music courses (of which six hours are elective) to satisfy concentration requirements and may elect up to 15 additional hours of course from the offerings of the Department in Applied Music, Music History, Music Theory, and Ensembles. Students transferring to the College and wishing to concentrate in Music must make individual arrangements with the Chairman of the Department regarding satisfaction of underclass requirements.

The following course work must be completed by all Music concentrators:

1. MU 101-102--Music Theory (6sh)
2. MU 103-104--Sight Singing and Dictation (3sh)
3. MU 201-202--Advanced Music Theory (6sh)
4. MU 203-204--Advanced Sight Singing and Dictation (3sh)
5. MU 271-272--Music History (6sh)
6. Two courses on or above the "300" level selected from courses listed below.

Additional course work beyond the minimum concentration requirement may be selected to a maximum of 45 hours from the following listing of approved courses. Depending upon the number of semester hours of course work elected from this listing, Music concentrators may elect up to 15 hours of Applied Music and Ensembles. Admission to Ensemble courses is subject to successful audition.

MU 231--Elementary Conducting
MU 301--Instrumentation and Orchestration
MU 311--18th Century Counterpoint
MU 312--20th Century Techniques in Composition
MU 313--Form and Analysis
MU 333--Advanced Conducting
MU 371--Music of the Middle Ages
MU 372--The Symphony
MU 373--Music of the Renaissance
MU 374--The Concerto
MU 375--Music of the Romantic Era
MU 376--Music of the 20th Century
MU 377--Experimental Music
MU 402--Advanced Orchestration
MU 411--16th Century Counterpoint
MU 472--Music of the Baroque Era
MU 473--Music of the Classical Era
MU 475--History of Opera
MU 477--Development of Musical Notation
MU 478--History of Choral Music

Music Specializations (Bachelor of Music)

The professional orientation of Bachelor of Music programs requires that students declare their intention of majoring in Music upon application for admission to the College and that music course work be undertaken immediately upon entry. All Bachelor of Music candidates pursue a core music program during the freshman year and are required to evidence outstanding musical proficiency for retention. At the end of the freshman or sophomore year, the music faculty will examine each student's progress before recommending sophomore or junior standing. Such review is conducted at the time specified for application to professional music programs.

At the end of the freshman year, students who are interested in programs for Musicology, Music Theory, and Performance must make formal application to the program director. Upon the recommendation of applied music instructors, applicants for the program in Performance are granted an audition before a faculty panel. Students who are not admitted at the end of the freshman year may reapply for a faculty audition at any time through the end of the sophomore year. A student whose competency in music skills does not warrant his admission to the Performance program at the end of the freshman year may be advised to correct his deficiencies through additional practice and applied lessons and to reapply at a time recommended by his applied instructor.

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Students who apply for Musicology and Music Theory programs at the end of the freshman year must evidence superior promise in the area in which they wish to specialize and are required to present appropriate evidence of their abilities as is determined by the theory or history faculty. A student whose promise in theory and history areas does not warrant his admission to Musicology or Music Theory programs at the end of the freshman year may be advised to correct his deficiencies through additional study and to reapply prior to the end of the sophomore year as recommended by history and theory faculty members.

Students intending to pursue teaching careers in music may apply for admission to the Music Education program at the end of their sophomore year in accordance with the regulations of the College governing teacher-education programs. For further information concerning admission to the Music Education program, consult the "Academic Policies Concerning Teacher-Education Programs" and the "Curriculum Requirements for Music Education" which appear elsewhere in this catalogue under the heading for Education. Individuals who anticipate application to the program in Music

Education should consult the "Course of Study for the Music Education Specialization" and plan their freshman and sophomore programs accordingly.

At the time of acceptance in an area of music specialization, the student is required to file a declaration of major study with the Office of the Registrar. This form may be secured from the Registrar and must be returned to his Office after required signatures have been obtained through the Director of Music Specialization Programs.

Students who pursue professional programs of the Bachelor of Music degree are required to follow the courses of Study for the Music Education, Musicology, Music Theory, and Performance Specializations, or they must develop acceptable alternative programs with their faculty advisors and the Chairman of the Department. Students transferring to the College and wishing to specialize in Music must make individual arrangements with the Chairman of the Department or program directors regarding satisfaction of underclass requirements.

Minor Area of Study

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Students possessing a fundamental knowledge of music may pursue a minor area of study in Music History upon the approval of the Chairman of the Department of Music. A minor area of study in Music History consists of 18-24 hours of course work and must be approved by Mr. Paul Bregor, coordinator of the music history faculty. At least 6 hours of the minor must be elected in courses numbered "300" or above in fulfilling the requirement for the Music History minor.

PARTICIPATION REQUIREMENTS FOR MUSICAL ORGANIZATIONS (INSTRUMENTAL ORGANIZATIONS)

Instrumental Ensembles

1. All music students whose major medium of performance is wind, string, or percussion must participate satisfactorily in the instrumental ensemble program in accordance with the requirements of their specialization.
2. Non-wind, string, or percussion majors may also participate in this program, but must meet established performance standards in order to be admitted to these instrumental organizations.
3. These organizations meet for five rehearsal hours per week.

4. These organizations award one credit per semester.
5. Placement in these organizations is determined by common auditions before a panel of the conductors of the organizations directly concerned. Students may express preference, but final placement will be decided by the panel.

Small Ensembles

1. All music students may elect to apply for membership in one or more of these ensembles. Membership is determined by audition, or by panel when applicable.
2. These ensembles will meet for two rehearsal hours per week.
3. These ensembles award one-half of a credit per semester. A minimum of two credits must be earned by all instrumental majors whose specializations are Music Education or Performance.

Workshop Organizations

1. Groups such as workshops, bands and orchestras exist as direct functions of the instrumental classes required of music education majors.
2. All wind, string, and percussion majors are required to earn a minimum of one credit in a workshop group or in an instrument other than their major during the semesters in which the instrumental classes are taken.
3. These groups meet for two hours per week and award one-half an academic credit per semester.
4. A student may not fulfill his musical organization requirement through membership in a workshop group.

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PARTICIPATION REQUIREMENTS FOR MUSICAL ORGANIZATIONS (VOCAL ORGANIZATIONS)

Vocal Ensembles

1. All music students whose major medium of performance is voice must participate satisfactorily in the vocal ensemble program in accordance with the requirements of their specializations.
2. Non-voice majors may also participate in this program but must meet established performance standards in order to be admitted to these choral organizations.
3. These organizations meet for five rehearsal hours per week, one of which will be devoted to Festival Chorus.
4. These organizations will award one credit per semester.

5. Placement in these organizations is determined by common auditions before a panel of the conductors of the organizations directly concerned. Students may express preference, but final placement will be decided by the panel.

Small Ensembles

1. All music students may elect to apply for membership in one or more small ensembles. Membership is determined by audition (or by panel when applicable) and must be supplemental to membership in the major performing organizations.
2. Small ensembles will meet for two rehearsal hours per week.
3. Small ensembles award one-half an academic credit per semester. A minimum of two credits must be earned by all vocal majors whose specializations are Music Education or Performance.

Workshop Organizations

1. All workshop organizations meet for two hours per week and award one-half of an academic credit per semester.
2. A vocal major may not fulfill his musical organization requirement through membership in a workshop choir.

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PARTICIPATION BY PIANO, ACCORDIAN AND GUITAR MAJORS

1. Students whose major area of performance is piano, accordian, or guitar must participate in the choral and / or instrumental programs satisfactorily for eight full semesters and in accordance with the requirements of their specializations.
2. These students must accumulate a minimum of six credits by participating in ensembles as follows:
 - a. Major Vocal and / or Instrumental Ensembles (1 cr. per sem.) for a minimum of 6 semesters.
 - b. A combination of Major (1 cr.), Small ($\frac{1}{2}$ cr.), and Workshop ($\frac{1}{2}$ cr.) Ensembles for a minimum of six credits.
 - c. A combination of Small and Workshop Ensembles for a minimum of six credits.
 - d. Credit may not be earned by participation in Festival Chorus alone.

MULTIPLE PARTICIPATION IN MUSICAL ORGANIZATIONS

1. Students who qualify through audition may participate in more than one major musical organization.
2. Students whose academic standing is not deemed satisfactory by the Department may be prohibited from multiple musical organization membership.

ORGANIZATIONAL DEFINITIONS

Major Organizations -- 1 credit per semester

1. The Instrumental Program: the Wind Ensemble, the Symphony Band, the Symphony orchestra
2. The Vocal Program: the Concert Choir, the Collegiate Chorale, the Opera Workshop

Laboratory Organizations --- ½ credit per semester

All performing groups other than those listed above are defined as chamber ensembles and meet twice a week. Credits for chamber ensembles and workshop organizations are awarded in addition to credit earned in major organizations.

PERFORMANCE REQUIREMENTS

Recital Hour

Recital hour performance is required each semester for students in the Performance program and once a year for all other music students with sophomore, junior, and senior class standing. Attendance at recital hour is expected and every student must attend a minimum of six recital hours per semester.

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Senior Recitals and Projects

Successful completion of a recital during the senior year is a requirement for graduation for students in Music Education and Performance programs. Successful completion of an approved project is a requirement for graduation for students in Musicology and Music Theory programs. Additional information concerning these requirements may be obtained through the Department.

Applied Music

All applied music courses require a minimum of eleven lessons and no student enrolled in such courses may for any reason whatsoever complete fewer than the required minimum. Each student enrolled in Applied Piano is required to accompany a minimum number of students (as determined by the Department). Students who fail to satisfy either of the above requirements are subject to administrative grades of "F".

COURSE OF STUDY FOR MUSIC EDUCATION SPECIALIZATION
(Bachelor of Music)

Freshman Year	Area Preferences		
	Voice	Keyboard	Orchestra
MU 101-102--Music Theory	6	6	6
MU 103-104--Sight Singing and Dictation	3	3	3
MU 181-182--Applied Music	4	4	4
MU 261--Vocal Ensemble	2		
MU 262--Instrumental Ensemble		1	2
MU 141-142--Functional Piano	2		2
MU 173-174--Keyboard Literature		4	
MU 061--Recital Hour	0	0	0
EN 101--English Composition	3	3	3
Uniform College Requirements	9	9	9
PE 001-002--Physical Education	0	0	0
	<u>29</u>	<u>30</u>	<u>29</u>
 Sophomore Year			
MU 201-202--Advanced Music Theory	6	6	6
MU 203-204--Advanced Sight Singing and Dictation	3	3	3
MU 281-282--Applied Music	4	4	4
MU 261--Vocal Ensemble	2		
MU 262--Instrumental Ensemble		1	2
MU 271-272--Music History and Literature	6	6	6
MU 241-242--Functional Piano	2		
MU 121-122--Instrumental Class		3	3
MU 061--Recital Hour	0	0	0
Uniform College Requirements	<u>12</u>	<u>12</u>	<u>12</u>
	35	35	36
 Junior Year (Fall Semester)			
MU 381--Applied Music	2	2	2
MU 261--Vocal Ensemble	1		
MU 262--Instrumental Ensemble		1	1
MU 231--Elementary Conducting	1	1	1
Music Theory or History Elective	3	3	3
MU 233--Diction for the Singer	2		
MU 221--Instrumental Class		1.5	1.5
MU 061--Recital Hour	0	0	0
Uniform College Requirements	3	3	3
FE 301--Philosophy of Education	3	3	3
FE 328--Dynamics of Interpersonal Relations for Teachers	<u>3</u>	<u>3</u>	<u>3</u>
	18	17.5	17.5

	Area Preferences		
	Voice	Keyboard	Orchestra
Junior Year (Spring Semester)			
MU 382--Applied Music	2	2	2
MU 261--Vocal Ensemble	1		
MU 262--Instrumental Ensemble		1	1
MU 333--Advanced Conducting	1	1	1
MU 234--Teaching of Singing	2		
Music Theory or History Elective	3	3	3
MU 222--Instrumental Class		1.5	1.5
ME 391--Music in the Elementary Schools	3	3	3
MU 061--Recital hour	0	0	0
Uniform College Requirements	6	6	6
	<u>18</u>	<u>17.5</u>	<u>17.5</u>

Senior Year (Fall Semester)

ME 491--Apprentice Teaching of Music in the Elementary School	4	4	4	225
Uniform College Requirements	6	6	6	
MU 481--Applied Music	2	2	2	
MU 261--Vocal Ensemble	1			
MU 262--Instrumental Ensemble		1	1	
MU 061--Recital Hour	0	0	0	
	<u>13</u>	<u>13</u>	<u>13</u>	

Senior Year (Spring Semester)

ME 393--Music in the Secondary Schools	3	3	3
ME 395--Curriculum Development and Evaluation in Music Education	4	4	4
ME 492--Apprentice Teaching of Music in the Secondary School	4	4	4
MU 482--Applied Music	2	2	2
MU 261--Vocal Ensemble	1		
MU 262--Instrumental Ensemble		1	1
MU 061--Recital Hour	0	0	0
	<u>14</u>	<u>14</u>	<u>14</u>

COURSE OF STUDY FOR MUSICOLOGY SPECIALIZATION
(Bachelor of Music)

Freshman Year

Freshman Year	Area Preference		
	Voice	Keyboard	Orchestra
MU 101-102--Music Theory	6	6	6
MU 103-104--Sight Singing & Dictation	3	3	3
MU 181-182--Applied Music	4	4	4
MU 261--Vocal Ensemble	2		
MU 262--Instrumental Ensemble			2
* Ensembles		1	
MU 141-142--Functional Piano	2		2
MU 173-174--Keyboard Literature		4	
MU 061--Recital Hour	0	0	0
EN 101--English Composition	3	3	3
Language Elective (Italian)	6		
Uniform College Requirements	3	9	9
PE 001-002--Physical Education	0	0	0
	<u>29</u>	<u>30</u>	<u>29</u>

Sophomore Year

MU 201-202--Advanced Music Theory	6	6	6
MU 203-204--Advanced Sight Singing & Dict.	3	3	3
MU 264--Applied Music	8	8	8
MU 261--Vocal Ensemble	2		
MU 262--Instrumental Ensemble			2
* Ensemble		1	
MU 271-272--Music History & Literature	6	6	6
MU 145-146--Piano Class	2		2
MU 243-244--Keyboard Harmony		4	
MU 231--Elementary Conducting	1	1	1
MU 061--Recital Hour	0	0	0
Uniform College Requirements	6	6	6
	<u>34</u>	<u>35</u>	<u>34</u>

* Keyboard and guitar majors, see ensemble participation requirements.

Junior Year

	Area Preference		
	Voice	Keyboard	Orchestra
MU 265--Applied Music	4	4	4
MU 305-306--Applied Solfege	4	4	4
MU 371--Music of the Middle Ages	3	3	3
MU 376--Music of the 20th Century	3	3	3
MU 343--Score Reading	2	2	2
MU 373--Music of the Renaissance	3	3	3
MU 375--Music of the Romantic Era	3	3	3
MU 061--Recital Hour	0	0	0
Language Elective (German)	6	6	6
Uniform College Requirements	3	3	3
	<u>31</u>	<u>31</u>	<u>31</u>

Senior Year

MU 265--Applied Music	4	4	4
MU 472--Music of the Baroque Era	3	3	3
MU 473--Music of the Classical Era	3	3	3
MU 474--Directed Study in Musicology	6	6	6
Music Theory Elective	3	3	3
MU 061--Recital Hour	0	0	0
Uniform College Requirements	12	12	12
	<u>31</u>	<u>31</u>	<u>31</u>

COURSE OF STUDY FOR MUSIC THEORY SPECIALIZATION
(Bachelor of Music)

Freshman Year

Freshman Year	Area Preference		
	Voice	Keyboard	Orchestra
MU 101-102--Music Theory	6	6	6
MU 103-104--Sight Singing & Dictation	3	3	3
MU 181-182--Applied Music	4	4	4
MU 261--Vocal Ensemble	2		
MU 262--Instrumental Ensemble			2
* Ensemble		1	
MU 141-142--Functional Piano	2		2
MU 173-174--Keyboard Literature	4		
MU 061--Recital Hour	0	0	0
EN 101--English Composition	3	3	3
Language Elective (Italian)	6		
Uniform College Requirements	3	9	9
PE 001-002--Physical Education	0	0	0
	<u>29</u>	<u>30</u>	<u>29</u>

Sophomore Year

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MU 201-202--Advanced Music Theory	6	6	6
MU 203-204--Advanced Sight Singing & Dect.	3	3	3
MU 264--Applied Music	8	8	8
MU 261--Vocal Ensemble	2		
MU 262--Instrumental Ensemble			2
* Ensemble		1	
MU 271-272--Music History & Literature	6	6	6
MMU 145-146--Piano Class	2		2
MU 243-244--Keyboard Harmony		4	
MU 231--Elementary Conducting	1	1	1
MU 061--Recital Hour	0	0	0
Uniform College Requirements	6	6	6
	<u>34</u>	<u>35</u>	<u>34</u>

* Keyboard and guitar majors, see ensemble participation requirements.

Junior Year

	Area Preference		
	Voice	Keyboard	Orchestra
MU 265--Applied Music	4	4	4
MU 311--18th Century Counterpoint	3	3	3
MU 305-306--Applied Solfege	4	4	4
MU 343--Score Reading	2	2	2
Music History Electives	6	6	6
MU 301--Instrumentation & Orchestration	3	3	3
MU 312--Contemporary Techniques in Comp.	3	3	3
MU 061--Recital Hour	0	0	0
Language Elective (German)	6	6	6
Uniform College Requirements	3	3	3
	<hr/> 34	<hr/> 34	<hr/> 34

Senior Year

MU 265--Applied Music	4	4	4
MU 402--Advanced Orchestration	3	3	3
MU 403--Directed Study in Composition	6	6	6
MU 411--16th Century Counterpoint	3	3	3
MU 061--Recital Hour	0	0	0
Uniform College Requirements	12	12	12
	<hr/> 28	<hr/> 28	<hr/> 28

COURSE OF STUDY FOR PERFORMANCE SPECIALIZATION
(Bachelor of Music)

Freshman Year	Area Preferences		
	Voice	Keyboard	Orchestra
MU 101-102--Music Theory	6	6	6
MU 103-104--Sight Singing & Dictation	3	3	3
MU 181-182--Applied Music	4	4	4
MU 261--Vocal Ensemble	2		
MU 262--Instrumental Ensemble			2
* Ensembles		1	
MU 141-142--Functional Piano	2		2
MU 173-174--Keyboard Literature		4	
MU 061--Recital Hour	0	0	0
EN 101-- English Composition	3	3	3
Language Elective (Italian)	6		
Uniform College Requirements	3	9	9
PE 001-002--Physical Education	0	0	0
	<u>29</u>	<u>30</u>	<u>29</u>

Sophomore Year

MU 201-202--Advanced Music Theory	6	6	6
MU 203-204--Advanced Sight Singing & Dict.	3	3	3
MU 264--Applied Music	8	8	8
MU 261--Vocal Ensemble	2		
MU 262--Instrumental Ensemble			2
* Ensembles		1	
MU 271-272--Music History & Literature	6	6	6
MU 145-146--Piano Class	2		2
MU 243-244--Keyboard Harmony		4	
MU 061--Recital Hour	0	0	0
MU 231--Elementary Conducting	1	1	1
Uniform College Requirements	6	6	6
	<u>34</u>	<u>35</u>	<u>34</u>

* Keyboard and guitar majors, see ensemble participation requirements.

Junior Year	Area Preferences		
	Voice	Keyboard	Orchestra
MU 264--Applied Music	8	8	8
MU 261--Vocal Ensemble	2		
MU 262--Instrumental Ensemble			2
MU 266--Ensembles		1 *	
Music Theory Electives	6	6	6
MU 305-306--Applied Solfege	4	4	4
MU 343--Score Reading		2	
MU 245-246--Piano Class	2		2
MU 333--Advanced Conducting	1	1	1
MU 344--Keyboard Accompanying		2	
MU 222--Instrumental Class			1.5
MU 061--Recital Hour	0	0	0
Language Elective (German)	6		
Uniform College Requirements	6	9	9
	<u>35</u>	<u>33</u>	<u>33.5</u>

Senior Year

MU 264--Applied Music	8	8	8
MU 261--Opera Workshop	2		
MU 262--Instrumental Ensemble			2
MU 266--Ensembles		1 *	
Music History Electives	6	6	6
MU 451--Master Class	1	1	
MU 235--Instrumental Coaching			1
MU 452--Recital Class	1	1	1
MU 234--Teaching of Singing	2		
MU 061--Recital Hour	0	0	0
Uniform College Requirements	9	12	12
	<u>29</u>	<u>29</u>	<u>30</u>

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*Keyboard majors may substitute participation in MU 262 in fulfillment of this requirement.

DEPARTMENTAL COURSE OFFERINGS:
MUSIC (Course Prefix MU)

FESTIVAL CHORUS

061 Open to all students in the College who meet the requirements. Major choral works are studied and prepared for public performance. Qualified students perform as soloists in oratorio and advanced choral music literature. Gilday. Non-credit. (Fall, Spring)

RECITAL HOUR

063 Weekly hour of student and faculty performances of solo and chamber music. Required attendance and performance as specified by statement of PERFORMANCE REQUIREMENTS. Lindblad. No credit. (Fall, Spring).

ELEMENTARY MUSIC THEORY I

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101 Detailed study of music theory, progressing to four - part harmonization of melodies using primary and secondary chords, non-harmonic tones, and simple modulation as exemplified in the music of the eighteenth century. Harmonic analysis and creative work are integrated with the written exercises. Holevas, Charette, Bouzianis, Arslanian, 3 sh. (Fall).

ELEMENTARY MUSIC THEORY II

102 Continuation of MU 101, progressing to a more advanced level. Holevas, Charette, Bouzianis, Arslanian. 3 sh. (Spring).

SIGHT SINGING AND DICTATION I

103 Concentrates mainly on solfege (developed by singing at sight) and on ear training (developed by rhythmic and melodic dictation). Course meets for three class hours per week. Arslanian, Holevas, Charette, Gay, Oak, White. 1½ sh. (Fall).

SIGHT SINGING AND DICTATION II

104 Continuation of MU 103, progressing to a

more advanced level. Course meets for three class hours per week. Arslanian, Gay, Oak, Holevas, Charette, White. 1½ sh. (Spring).

MUSIC FOR THE CLASSROOM TEACHER

113 Emphasis on basic musical skills and approaches that would enable the elementary classroom teacher to use music in the normal course of elementary classroom activity. Ashley. 3 sh. (Fall, Spring).

INSTRUMENTAL CLASS I

121 Intensive class instruction in the fundamentals of playing instruments. The student is expected to gain skill for beginning teaching and demonstration purposes. Course meets for three class hours per week. Elliot and Members of the Department 1½ sh. (Fall).

INSTRUMENTAL CLASS II

122 Continuation of MU 121. 1½ sh. (Spring).

FUNCTIONAL PIANO I

141 The development of good keyboard reading habits and the development of a repertoire of keyboard pieces, with special attention given to developing those reading skills, keyboard techniques, and interpretive styles necessary for the playing of keyboard accompaniment. Bregor. Lindblad, Allen. 1 sh. (Fall).

FUNCTIONAL PIANO II

142 Continuation of MU 141, progressing to a more advanced level. Bregor, Lindblad, Allen. 1 sh. (Spring).

PIANO CLASS I

145 Group piano lessons for non-keyboard majors. Course is similar to Functional Piano but without emphasis upon public school classroom skills. Enrollment limited to eight students per section. Two meetings per week. Allen. 1 sh. (Fall).

PIANO CLASS II

- 146 Continuation of MU 145, progressing to a more advanced level. Two meetings per week. Allen. 1 sh. (Spring).

MUSIC OF WESTERN CIVILIZATION

- 171 A survey of music from the troubadours to the aleatoric music of the present. Significant forms, styles, and aesthetic concepts are examined. Chamber music, leidei, opera, oratorio, symphonic music, and other mediums are studied. Philosophies of music are examined against specific periods in history. Smith. 3 sh. (Fall, Spring).

KEYBOARD LITERATURE I

- 173 Through recordings and performances by the instructor and background material from the adopted text and other sources, this course acquaints students with the vast keyboard repertoire from the 16th century through the early Beethoven sonatas. Allen. 2 sh. (Fall).

KEYBOARD LITERATURE II

- 174 Through recordings and performances by the instructor and background material from the adopted text and other sources, this course covers keyboard literature from the middle and late Beethoven sonatas to current 19th century composers. Allen. 2 sh. (Spring).

APPLIED MUSIC

- 181 Fourteen private half-hour lessons with a jury examination. Enrollment on the principle instrument is mandatory during each full-time semester for Bachelor of Music candidates in Music Education. Applied courses must be sequentially completed at least through MU 482 by Bachelor of Music candidates in Music Education. Subject to an additional fee, this course may be elected on a secondary instrument for purposes of audit or credit. Holevas and applied music faculty. 2 sh. (Fall).

APPLIED MUSIC

- 182 Fourteen private half-hour lessons with a jury examination. Enrollment on the principle instrument is mandatory during each full-time semester for Bachelor of Music candidates in Music Education. Applied courses must be sequentially completed at least through MU 482 by Bachelor of Music candidates in Music Education. Subject to an additional fee, this course may be elected on a secondary instrument for purposes of audit or credit. Holevas and applied music faculty. 2 sh. (Spring).

ADVANCED MUSIC THEORY I

- 201 Advanced harmony, including secondary dominants, secondary seventh chords, altered chords, realization of figured basses, and chromatic modulation as exemplified in the music of the nineteenth century. Corresponding progress is made in the integrated studies; harmonic and structural analysis and creative work. Arslanian, Holevas, Charette, Bouzianis. 3 sh. (Fall).

ADVANCED MUSIC THEORY II

- 202 Continuation of MU 201, progressing to more advanced levels. Arslanian, Holevas, Bouzianis, Charette. 3 sh. (Spring).

ADVANCED SIGHT SINGING AND DICTATION I

- 203 Continuation of MU 104, progressing to more difficult music, two - part melodic dictation, choral dictation, and the study of C clefs. Course meets for three class hours per week. Arslanian, Gay, Lindblad, Bouzianis, Charette, White. 1½ sh. (Fall).

ADVANCED SIGHT SINGING AND DICTATION II

- 204 Continuation of MU 203. Course meets for three class hours per week. Arslanian, Gay, Charette, Bouzianis, White. 1½ sh. (Spring).

INSTRUMENTAL CLASS III

221 Intensive class instruction in the fundamentals of playing instruments. The student is expected to gain skill for beginning teaching and demonstration purposes. Course meets for three class hours per week. Elliot and Members of the Department. 1½ sh. (Fall).

INSTRUMENTAL CLASS IV

222 Continuation of MU 221. 1½ sh. (Spring).

ELEMENTARY CONDUCTING

231 Offers training in the technique of the baton as preparation for advanced instrumental and choral conducting. With laboratory experience, the student acquires knowledge of the basic problems of conducting and their solutions. Course meets for two class hours per week. Elliot, Oak. 1 sh. (Fall, Spring).

DICTION FOR THE SINGER

233 A study of French, German, and Italian diction as it applies to vocalist and choral conductor. Oak. 2 sh. (Fall).

THE TEACHING OF SINGING

234 Exploration of the various techniques of vocal pedagogy in a class situation, directed toward the voice teacher and choral conductor. Oak. 2 sh. (Spring).

INSTRUMENTAL COACHING

235 Supervised group instruction in orchestral performance. Gay. 1 sh. (Fall).

CLASS VOICE

236 This course is intended to cultivate the fundamental principles of singing. The psychology of singing and the physiology of the singing voice are considered as they apply to tone, production, resonance, breath control, projection, diction, and other related

aspects. Open only to non-voice majors. Bouzianis. 1 sh. (By demand).

FUNCTIONAL PIANO II

241 Continuation of MU 142, progressing to a more advanced level. Bregor, Lindblad. 1 sh. (Fall).

FUNCTIONAL PIANO IV

242 A continuation of MU 241, progressing to a more advanced level. Bregor, Lindblad. 1 sh. (Spring).

KEYBOARD HARMONY I

243 The curriculum of this course is flexible, and attempts to be responsive to the particular needs of the individual student, both in content and in structure. Some areas of consideration are figured bass, continuo playing, accompaniment, transportation, arranging for keyboard. Combination of class time, private consultation and individual work projects will be used to provide each student with a program suited to his own way of working. Ogasapian. 2 sh. (Fall).

KEYBOARD HARMONY II

244 Continuation of MU 243, progressing to a more advanced level. Ogasapian. 2 sh. (Spring).

PIANO CLASS III

245 Continuation of MU 146, progressing to a more advanced level. Two meetings per week. Allen. 1 sh. (Fall).

PIANO CLASS IV

246 Continuation of MU 245, progressing to a more advanced level. Two meetings per week. Allen. 1 sh. (Spring).

VOCAL ENSEMBLE

261 CONCERT CHOIR: Open to a limited

number of students selected by audition. The members study a wide variety of choral compositions and perform frequently in public and at college-functions. Gilday. 1 sh. (Fall, Spring).

261 COLLEGIATE CHORALE: Open to all students by audition. Required for vocal majors who are not members of the Concert Choir. Includes the study and performance of a wide variety of choral compositions. White. 1 sh. (Fall, Spring).

261 OPERA WORKSHOP: Introductory experiences in both practice and theory of opera performance. During each semester, every student participates in the public performance of at least two scenes from the repertoire of dramatic music. Problem solving and pedagogical areas include preparation of roles, rehearsal techniques, acting and stage direction, theatrical organization, ensemble singing, and a brief survey of operatic literature and traditions. By permission of instructor. 1 sh. (Fall, Spring).

261 WORKSHOP CHORUS: Open to all music concentrators and other students who enjoy singing. Standard choral literature is studied and performed in public and at College functions. Gilday. ½ sh. (Fall, Spring).

INSTRUMENTAL ENSEMBLE

262 WIND ENSEMBLE: Advanced instrumentalists are eligible for this ensemble and are selected by audition. Works for widely varied instrumentation from traditional and contemporary repertoire are studied and performed in public. Extended concert tours and special appearances are part of the Wind Ensemble's normal function. Elliot, Traphagan. 1 sh. (Fall, Spring).

262 SYMPHONY BAND: Open to all students by audition. Required of wind instrument and percussion majors who are not members of the Wind Ensemble or Symphony Orchestra. Works suitable for symphonic wind groups

are studied and performed in public. Elliot, Traphagan. 1 sh. (Fall, Spring).

262 WORKSHOP BAND: For students to perform on instruments other than their major. Provides ensemble experience on a band instrument, with the repertoire limited accompaniment is offered. Gay 1 sh. (Fall, Spring).

262 SYMPHONY ORCHESTRA: Advanced instrumentalists are selected by audition. Works suitable for symphony orchestra are studied and performed in public. Opportunity for solo performance with orchestral accompaniment is offered. Gay. 1 sh. (Fall, Spring).

262 WORKSHOP ORCHESTRA: For students to perform on instruments other than their major. Provides ensemble experience on stringed instruments, with the repertoire limited to elementary and intermediate materials Pordon. ½ sh. (Fall, Spring).

APPLIED MUSIC

264 For students specializing in performance, musicology, and music theory. Fourteen private one hour lessons with a jury examination of each student's performance on his principle instrument. May be repeated for credit. Holevas and applied music faculty. 4 sh. (Fall, Spring).

APPLIED MUSIC

265 For students specializing in music theory and musicology who have completed their program requirements under MU 264. Fourteen private, one-hour lessons with a jury examination of each student's performance on his principle and/or secondary instrument. May be repeated for credit. Holevas and applied music faculty. 2 sh. (Fall, Spring).

SMALL ENSEMBLES

266 BRASS CHOIR: Advanced brass players are eligible and are selected through audition. Annual tour and public performances of high

quality compositions for brass and percussion instruments. Gay ½ sh. (Fall, Spring).

- 266 **CHAMBER ENSEMBLES:** For students interested in small ensembles; string quartets, chamber orchestra, madrigal groups, piano ensembles, and brass and woodwind ensembles are organized to encourage study and performance in this type of musical activity. Members of the Department. ½ sh. (Fall, Spring).

MUSIC HISTORY AND LITERATURE TO BACH

- 271 A study is made of the development of the sacred and secular forms of music from the pre-Christian era up to the middle of the eighteenth century. Bregor, Ogasapian. 3 sh. (Fall).

MUSIC HISTORY AND LITERATURE SINCE BACH

- 236 272 Studies the music of the period from the middle of the eighteenth century to the present. The impact on music of the changing social philosophies is analyzed. Bregor, Ogasapian. 3 sh. (Spring).

SURVEY OF AMERICAN MUSIC

- 276 An historical survey of Music in the U.S. beginning with the Psalter and ending with electronic music. Open to non-music majors only. Ashley. 3 sh. (Fall).

APPLIED MUSIC

- 281 Fourteen private half-hour lessons with a jury examination. Enrollment on the principle instrument is mandatory during each full-time semester for Bachelor of Music candidates in Music Education. Applied courses must be sequentially completed at least through MU 482 by Bachelor of Music candidates in Music Education. Subject to an additional fee, this course may be elected on a secondary instrument for purposes of audit or credit.

Holevas and applied music faculty. 2 sh. (Fall).

APPLIED MUSIC

- 282 Fourteen private half-hour lessons with a jury examination. Enrollment on the principle instrument is mandatory during each full-time semester for Bachelor of Music candidates in Music Education. Applied courses must be sequentially completed at least through MU 482 by Bachelor of Music candidates in Music Education. Subject to an additional fee, this course may be elected on a secondary instrument for purposes of audit or credit. Holevas and applied music faculty. 2 sh. (Spring).

INSTRUMENTATION AND ORCHESTRATION

- 301 The study of instrumentation and orchestration, emphasizing score reading and the writing of music for all orchestral instruments -- individually and in combination. Arslanian. 3 sh. (Fall, Spring).

VOCAL SIGHT SINGING I

- 303 This course is intended for vocalists and keyboard players who possess above average ability and interest in vocal music. Material will be selected to cover the problems arising from performance of twentieth century and pre-Baroque vocal music. 2 sh. (Fall).

VOCAL SIGHT SINGING II

- 304 Continuation of MU 303. 2 sh. (Spring).

APPLIED SOLFEGE I

- 305 Intended for instrumental majors, this course relates acquired solfège skills to the student's instrument through individual and group performance of selected material. Enrollment limited to twelve students per section. Gay 2 sh. (Fall).

APPLIED SOLFEGE II

306 Continuation of MU 305. Gay 2 sh. (Spring).

EIGHTEENTH CENTURY COUNTERPOINT

311 The study of the vocal and instrumental polyphony of the eighteenth century, based on tonality. Choral and instrumental composition in this style is emphasized. Representative music of the eighteenth century is analyzed from a contrapuntal point of view. Bouzianis, Smith. 3 sh. (Fall, Spring).

CONTEMPORARY TECHNIQUES IN COMPOSITION

312 Intended for theory-composition majors, this course concentrates on developing the student's ability to utilize 20th Century techniques in his writing. Gay. 3 sh. (Fall).

FORM AND ANALYSIS

313 Study of formal relationships and harmonic structure of literature selected from various periods of musical endeavor. Ogasapian. 3 sh. (Spring 1973)

ADVANCED CONDUCTING

333 The study of advanced conducting techniques in both instrumental and vocal areas. The reading of scores, rehearsal techniques, and advanced baton techniques are included. Two class hours per week. Gilday, Traphagan. 1 sh. (Fall, Spring).

VOCAL ARRANGING

336 Analysis and practical application of techniques of vocal scoring, including women's voices, men's voices, and mixed voices in varied configurations and music styles. Bouzianis. 3 sh. (Fall, Spring).

FUNCTIONAL PIANO V

341 Continuation of MU 242, progressing to a

more advanced level. Bregor, Lindblad. 1 sh. (Fall).

FUNCTIONAL PIANO VI

342 Continuation of MU 341, progressing to a more advanced level. Bregor, Lindblad. 1 sh. (Spring).

SCORE READING

343 Development of score reading ability through keyboard performance of increasingly difficult exercises and scores. Included are clef studies and transposition. Gay 2 sh. (Fall, 1973).

KEYBOARD ACCOMPANYING

344 Intended for keyboard majors, this course is addressed to the major problems accompaniment. 1 sh. (Spring).

MUSIC OF THE MIDDLE AGES

371 Music to 1400, with emphasis on early Christian chant, secular song, and the development of polyphony. Ogasapian. 3 sh. (Fall, 1972).

THE SYMPHONY

372 Scores and recordings are used to study the masterpieces of symphonic literature from Hayden to Mahler. Bregor. 3 sh. (Spring, 1974).

MUSIC OF THE RENAISSANCE

373 A study of the mass of motet, chanson and madrigal, and the development of instrumental music of the fifteenth and sixteenth centuries. White. 3 sh. (Fall, 1973).

THE CONCERTO

374 Representative works from Mozart to the end of the 19th century are studied with the aid of scores and recordings. Bregor. 3 sh. (Spring, 1973).

MUSIC OF THE ROMANTIC ERA

- 375 A study of the instrumental and vocal forms of the nineteenth century from Beethoven through Wagner. Bregor. 3 sh. (Fall, 1973).

MUSIC OF THE TWENTIETH CENTURY

- 376 An examination of the stylistic trends of contemporary music, beginning with the late romantics and proceeding to the current forms of experimental music. Emphasis is placed on listening and analysis, as well as musicological commentary. White. 3 sh. (Spring, 1973).

EXPERIMENTAL MUSIC

- 377 A survey of the most recent experiments in music and related fields (electronic music, concept art, happenings, experimental TV and cinema) and a workshop in which students create and perform original works. Smith. 3 sh. (Fall, Spring).

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APPLIED MUSIC

- 381 Fourteen private half-hour lessons with a jury examination. Enrollment on the principle instrument is mandatory during each full-time semester for Bachelor of Music candidates in Music Education. Applied courses must be sequentially completed at least through MU 482 by Bachelor of Music candidates in Music Education. Subject to an additional fee, this course may be elected on a secondary instrument for purposes of audit or credit. Holevas and applied music faculty. 2 sh. (Fall).

APPLIED MUSIC

- 382 Fourteen private half-hour lessons with a jury examination. Enrollment on the principle instrument is mandatory during each full-time semester for Bachelor of Music candidates in Music Education. Applied courses must be sequentially completed at least through MU 482 by Bachelor of Music candidates in Music

Education. Subject to an additional fee, this course may be elected on a secondary instrument for purposes of audit or credit. Holevas and applied music faculty. 2 sh. (Spring).

ADVANCED ORCHESTRATION

- 402 Intended for theory majors, this course is a continuation of MU 301, with special emphasis upon the orchestration of student compositions. 3 sh. (By demand).

SIXTEENTH CENTURY COUNTERPOINT

- 411 Contrapuntal studies based upon common practice in the sixteenth century. Bouzainis. 3 sh. (Fall).

MASTER CLASS

- 451 An extension of applied study. Under the guidance of a specialist, groups of students work on problems related to their major instruments. May be repeated once for credit. 1 sh. (Fall).

RECITAL CLASS

- 452 Recital tradition, deportment, program practice, and problems of interpretative style are studied in preparation for the professional recital. May be repeated once for credit. Gay. 1 sh. (Fall).

MUSIC OF THE BAROQUE ERA

- 472 A stylistic study of the period 1600-1750 from Monteverdi through Bach and Handel. Ogasapian. 3 sh. (Spring, 1974).

MUSIC OF THE CLASSICAL ERA

- 473 A study is made of the solo, ensemble, symphonic, and operatic literature from 1750-1820. Bregor. 3 sh. (Fall, 1972).

HISTORY OF OPERA

- 475 This course is designed to familiarize the student with the salient developments in the

evolution of opera as a musical form. Selected works by Monteverdi, Cully, Rameau, Purcell, Handel, Gluck, Mozart, Roccini, Verdi, Wagner, Straus, Puccini, and Britten will be heard and discussed. White. 3 sh. (Fall, 1974).

DEVELOPMENT OF MUSICAL NOTATION

477 A study of the evolution of musical notation from the middle ages and renaissance to its present form, using musical and theoretical sources of the time. The class format is that of a seminar in which transcription of early music into modern notation is carried out and the inherent problems are discussed. Ogasapian. 3 sh. (Fall, 1973).

HISTORY OF CHORAL MUSIC

478 The history of choral music is surveyed from the time of Okgehem to the late Stravinsky. This course will discuss the individual approaches to choral composition as well as the stylistic manifestations of the period. White. 3 sh. (Spring, 1974).

APPLIED MUSIC

481 Fourteen private half-hour lessons with a jury examination. Enrollment on the principle instrument is mandatory during each full-time semester for Bachelor of Music candidates in Music Education. Applied courses must be sequentially completed at least through MU 482 by Bachelor of Music candidates in Music Education. Subject to an additional fee, this course may be elected on a secondary instrument for purposes of audit or credit. Holevas and applied music faculty. 2 sh. (Fall).

APPLIED MUSIC

482 Fourteen private half-hour lessons with a jury examination. Enrollment on the principle instrument is mandatory during each full-time semester for Bachelor of Music candidates in Music Education. Applied courses must be sequentially completed at least through MU 482 by Bachelor of Music candidates in Music Education. Subject to an additional fee, this course may be elected on a secondary instrument for purposes of audit or credit. Holevas and applied music faculty. 2 sh. (Spring).

DIRECTED STUDIES IN COMPOSITION

491 Individual composition under the direction of faculty theorist. May be repeated for credit. 3 sh. (By arrangement).

DIRECTED STUDIES IN MUSICOLOGY

492 Private study devoted to research projects of significant proportions with a music-history instructor. May be repeated for credit. 3 sh. (By arrangement).

ADVANCED TUTORIAL IN MUSIC

495 A program of directed studies which affords the advanced student with an additional opportunity to pursue a previously explored problem in greater depth or to initiate an additional problem. The purpose is to sharpen and refine techniques for scholarly research and presentation and for creative expression. Prerequisite: Demonstrated proficiency in an area selected for directed studies and permission of instructor. 3 sh. (By arrangement).



NURSING

Gertrude Barker, Chairman
Department of Nursing

The Department of Nursing offers a major specialization in Nursing leading to the Bachelor of Science degree. In addition to the 48 semester hours of prescribed course work in Nursing, students matriculating for the Bachelor of Science degree in Nursing are required to satisfy basic course requirements in the behavioral, biological, and natural sciences as follows: PS 101--General Psychology, PS 163--Developmental Psychology, PS 272--Abnormal Psychology, one course in Sociology (SO 101--Introduction to Sociological Analysis, SO 201--Social Anthropology, or SO 222--Contemporary Social Problems), BI 223-224--Anatomy and Physiology, BI 231--Clinical Microbiology, CH 111-112--General Chemistry, and MA 206--Elementary Statistical Analysis.

Nursing students who wish to carry a minor area of study may select any of the following minors: Behavioral Science, Biology, General Science, Psychology, Social Science, and Sociology. Requirements for minor studies are outlined in the introductory statements of departments administering specific minors and are developed in consultation with faculty advisors of the Nursing Department. Upon the approval of the student's faculty advisor, Nursing students may pursue a program of related minor studies in accordance with their needs and interests for the purpose of providing greater personal and professional relevance to their major specialization. Such programs may be developed from any number of disciplines but must include at least 6 semester hours of courses which are on or above the "300" course level. Nursing students may also pursue programs of elective courses in liberal-arts areas which are suitable to their needs and interests, except that such courses must be chosen with the guidance and approval of their faculty advisors and must include at least 6 semester hours of courses which are on or above the "300" course level.

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The clinical aspects of the nursing course are planned and conducted by the nursing faculty of the College in collaboration with members of community agencies. The following community agencies are presently utilized by the College: the Goodwill Industries, the Lowell Association for Retarded Children, the Lowell Day Nursery, the Lowell General Hospital, the Lowell Public Health Department, the Lowell Visiting Nurse Association, the Medical Associates of

Chelmsford, Saint John's Hospital, Saint Joseph's Hospital, the Solomon Mental Health Center, and the Tewksbury Hospital.

Students specializing in Nursing are advised to follow the recommended course of study on the following pages or to work out acceptable alternative programs with the Chairman of the Nursing Department. Students transferring to the College and wishing to specialize in Nursing must make individual arrangements with the Chairman of the Department regarding satisfaction of underclass requirements.

Special Regulations Governing Nursing Program

In addition to the general rules and regulations of the College, students in Nursing are subject to the following policies of the Department of Nursing:

1. The Faculty of the Department of Nursing reserve the right to retain only those students who in their judgment satisfy the requirements of scholarship, health, and personal suitability for professional nursing.*
2. Registered nurses who are graduates of diploma and associate degree nursing programs may be admitted to the program in Nursing subject to the transfer policies of the College and the rules and regulations concerning "Advanced Placement with Course Credit Through Examinations." Students who may be interested in such examination credit should also consult the rules and regulations governing "Course Equivalency Procedures" which appear elsewhere in this catalogue under the heading for Undergraduate Academic Policies.
3. R.N. students may challenge junior year nursing courses by taking course examinations of the Department with generic students. Courses which are offered during the fall semester must be challenged during the January examination period. Spring courses must be challenged during the examination period in May. Contrary to general rules governing the administration of equivalency examinations, students wishing to challenge junior nursing courses must file for permission to take specific examinations during the pre-registration period immediately preceding the January or May examination period. For instance, a student who desires to challenge a fall course through the scheduled January examination must file for permission during the spring pre-registration in October. Students may not take examinations unless instructors have received approved applications from the Registrar. R.N. students are authorized by the Academic Dean to petition for examinations after the established calendar deadline.

*Detailed statements of retention standards are available upon request from the Chairman, Department of Nursing.

4. R.N. students who are unable to complete their curriculum requirements for graduation by 1974 must satisfy the revised curriculum requirements which are effective for the graduating class of 1975. This may necessitate a longer period of study.
5. The credentials of each transfer and R.N. applicant for credit will be considered individually on their own merits, but in no case may a student reduce the basic residency requirement of the College through any combination of transfer, advanced placement with credit, or course equivalency procedures.
6. All nursing students are required to carry liability insurance at their own expense from the beginning of the junior year (or from the initiation of clinical course work) to the time of graduation.

Philosophy of the Department of Nursing

The members of the Department of Nursing believe that man is a unique, rational being who purposefully interacts in a changing environment. They believe that man as an individual has an innate right to make choices and establish goals relative to his future. Fundamental to this right is a level of health which allows the individual to function within his social system and to realize his individual potentialities.

In accepting the philosophy of the College of which it is a part, the members of the Department hold that nursing as a profession is based on an appreciation of those arts which record insights into his experience, an understanding of those organizations and institutions which are the sources of his social and cultural values, and a realization of the import of scientific developments for his life and his environment. Nursing is an interacting process among and for individuals in a caring, doing, and knowing relationship. As a service to the individual and society, nursing seeks to promote health and prevent disease by assisting the individual, the family, and the community in the pursuit of well being.

The members of the Department of Nursing believe that education is a creative, life-time endeavor which involves continuous personal growth and social interaction. It promotes that continuous independent and cooperative inquiry, critical self-analysis, and enlightened social criticism which enables the learner to function as a contributing member of the community. Education for nursing prepares the learner to apply and to modify specialized concepts and skills for the attainment of man's well-being.

Objectives of the Nursing Program

The Faculty of the Department of Nursing recognize the following program objectives:

1. To acknowledge each man's unique right to personal well-being;
2. To plan and administer comprehensive nursing intervention as a therapeutic process to the individual, the family, and the community;

3. To foster continuous personal and professional growth through self-understanding and self-direction;
4. To develop a critical ability for evaluating issues relevant to self, profession, and society;
5. To develop concepts of nursing through systematic inquiry;
6. To accept responsibility for nursing leadership in effecting change for the benefit of man; and
7. To provide students with a foundation for graduate study in nursing.

Characteristics of the Nursing Graduate

Upon successful completion of the baccalaureate program in Nursing at Lowell State College, students have attained sufficient competencies in the humanities, the social sciences, the sciences, and nursing to develop the following characteristics:

1. They value the dignity and worth of the individual, his capacity for self-realization, and his ability for purposeful interaction.
2. They can assess, plan, implement and evaluate nursing care for people of all ages in a variety of settings.
3. They can interpret and demonstrate nursing care to patients and their families, to associated personnel, and to members of other professions.
4. They can assist individuals and families in identifying their health needs and can collaborate with patients, families, and others in meeting these needs.
5. They can identify principles from the humanities and the behavioral, biological, and natural sciences and can utilize these principles in the practice of professional nursing.
6. They are aware of the implications which social and physical forces have upon man and his environment and can apply these to nursing care.
7. They can participate in planning and implementing community health programs.
8. They can maintain interpersonal relationships based on an awareness of self and the knowledge that all behavior is meaningful.
9. They can progress without further formal education to positions requiring beginning administrative skills.
10. They can assume responsibility for their growth as persons, as professional practitioners, and as contributing members of society.

11. They can identify the role of the professional nurse and can assume responsibility for becoming a role model.
12. They can function as change agents for man's well-being through responsible leadership.
13. They can utilize research findings selectively in the practice of professional nursing.

**COURSE OF STUDY FOR MAJOR SPECIALIZATION IN NURSING
(BACHELOR OF SCIENCE): CLASSES OF 1973 and 1974**

Junior Year

PS 352--Abnormal Psychology	3	
General Education Literature Elective	3	
General Education Elective	3	
Minor Elective	3	
NU 301--Nursing III	9	
NU 311--Nursing IV	<u>12</u>	
	33	

Senior Year

NU 401--Nursing V	12	245
NU 411--Nursing VI	6	
NU 412--Independent Study in Nursing	4	
General Education Electives	6	
Social Science, Physical Science, or Unrestricted Elective	<u>3</u>	
	31	

**COURSE OF STUDY FOR MAJOR SPECIALIZATION IN NURSING
(BACHELOR OF SCIENCE): CLASS OF 1975 AND FOLLOWING CLASSES**

Freshman Year

CH 111-112--General Chemistry	8	
EN 101--English Composition	3	
EN 132--Types of Literature	3	
PS 101--General Psychology	3	
PS 163--Developmental Psychology	3	
SO 101--Introduction to Sociological Analysis, SO 222--Contemporary Social Problems, or SO 201--Social Anthropology	3	
Government Requirement Elective (PO 101, 111, 225, 238)	3	
History Electives	6	
PE 001-002--Physical Education	<u>0</u>	
	32	

Sophomore Year

BI 223-224--Anatomy and Physiology	8
BI 231--Clinical Microbiology	4
MA 206--Elementary Statistical Analysis	3
PS 272--Abnormal Psychology	3
Literature Elective	3
Electives *	<u>9</u>
	30

Junior Year

NU 301-302--Nursing Science I and II	24
Electives*	<u>6-8</u>
	30-32

Senior Year

NU 401-402--Nursing Science III and IV	24
Electives*	<u>6-8</u>
	30-32

*Students electing minor studies are required to complete 18 hours of course work in accordance with policies governing minor programs. At least 6 semester hours of elective courses must be taken in courses at the "300" and / or "400" levels.

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DEPARTMENTAL COURSE OFFERINGS: NURSING (Course Prefix NU)

FOR CLASSES OF 1973, 1974 Only)

NURSING III

301 This course examines the pathophysiology, medical regimen, and psycho-social aspects of the prevalent health problems which affect mankind. Attention is paid to the processes of nursing assessment and nursing intervention. Concurrent clinical laboratory experience provides the learner with an opportunity to transfer theory to practice, to develop technical skills and problem-solving ability, and to evaluate the effectiveness of selected nursing practices. Prerequisite: NU 202, BI 231, BI 224. 9 sh. (Fall, Spring).

NURSING IV

311 This course focuses on the nursing of families during child-bearing and child-rearing years. Promotion of health care and supervision is emphasized. Common problems and concerns of families are identified and nursing intervention is defined. Prerequisites: NU 202, PS 163, BI 231, BI 224. 12 sh. (Fall, Spring).

NURSING V

401 A study of the several aspects of psychiatric nursing care and the principles of public health nursing. Supervised clinical experiences provide opportunities for interaction with mentally disturbed patients, for conferences, clinics, and practice in the

care of psychiatric patients, and for participation in voluntary visiting nurse agencies and public health services. Prerequisites: PS 272, NU 301, NU 311. 12 sh. (Fall, Spring).

NURSING VI

- 411 Emphasis is on the leadership role of the nurse. Considers aspects of interpersonal relations, teaching, supervision, and hospital organization which is relevant to supervising auxiliary personnel. Clinical practice as a team leader and weekly seminars in group dynamics are included. Prerequisites: NU 301, NU 311, 6 sh. (Fall, Spring).

INDEPENDENT STUDY IN NURSING

- 412 An introduction to basic research techniques and their application to a nursing project and a study of nursing trends, legal responsibilities, professional organizations, and career and graduate study opportunities in nursing. Independent readings and identification and resolution of a nursing problem in an area of student interest. Prerequisites: NU 301, NU 311, 4 sh. (Fall, Spring).

(FOR CLASS OF 1975 AND FOLLOWING CLASSES)

NURSING SCIENCE I

- 301 Introduces professional nursing by means of learning experiences (theory and practice) that relate to the maintenance and improvement of health, utilizing a growth

and development focus. This is achieved through evaluation of the condition or environment of the patient and the patient's family and helping the family to deal with the physical, emotional, and social changes incident to childbearing. Emphases are on the family and patient in the distributive setting. 12 sh. (Fall, 1973).

NURSING SCIENCE II

- 302 A continuation of the central theme of growth and development in the school-age child through adolescence and early adulthood. Physical, psychological, and sociological problems of development are considered. Promotion of health care and supervision are emphasized. Primary learning experiences are developed in episodic and or distributive settings. 12 sh. (Spring, 1973).

NURSING SCIENCE III

- 401 A continuation of the central theme of growth and development during adulthood through senescence. Physical, psychological; and sociological problems of the adult are considered in relation to the family and or the individual. 12 sh. (Fall, 1974).

NURSING SCIENCE IV

- 402 The leadership role of the nurse is explored through knowledge and understanding of the research process. The student selects a nursing problem for investigation in either an episodic or distributive setting. 12 sh. (Spring, 1975).



PHILOSOPHY

Paul Christopher Smith, Chairman
Department of Philosophy

The Department of Philosophy offers a major concentration in Philosophy leading to the Bachelor of Arts degree and a supporting concentration in Philosophy for students who can arrange a second concentration. The Department also offers a minor study in Philosophy.

Philosophy Concentration

A concentration in Philosophy is designed to serve the needs of four types of students: (1) those who seek a liberal arts education as a terminal program; (2) those who are preparing for professional graduate schools, e.g. education, law, theology, and medical schools which approve an undergraduate philosophy major; (3) those who desire to enter elementary teaching after receiving a basic foundation in philosophical studies; and (4) those who are preparing for graduate work in philosophy. Regardless of the goals which undergraduates may have set for themselves, a concentration in philosophy should be of value to all who question the reasons for things as they are, to those who seek a deeper understanding of what they are doing and for what purpose they are doing it, and to those who recognize the validity of Socrates' assertion that "the unquestioned life is not worth living."

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Concentrations in Philosophy (both the major degree concentration and the supporting second concentration) consist of 30-45 hours of course work selected in consultation with departmental advisors or with the Chairman of the Department. Although the Department does not specify particular course work for the concentration, it recommends that concentrators elect PH 202--Logic I or PH 307--Philosophy of Language, at least one course from the history of philosophy sequence ("250" course), two courses from the topical sequence ("300" courses), and two courses from the types of philosophy sequence ("350" courses). The sequence of courses should be designed in consultation with the student's faculty advisor. Students who plan to go to graduate school are encouraged to take a second major in a cognate field, e.g. American Studies, English, French, History, Mathematics, or Spanish.

Students intending to pursue teaching careers at the elementary level may

apply to the Elementary Education program at the end of the sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" and "Course of Study for Elementary Education and Philosophy" which appear elsewhere in this catalogue under the heading for Education.

Students transferring to the College and wishing to concentrate in Philosophy must make individual arrangements with the Chairman of the Department of Philosophy regarding satisfaction of underclass requirements.

Minor Area of Study

A minor area of study consists of 18-24 hours of course work in Philosophy. At least 6 hours must be selected from courses which are numbered "300" or above.

DEPARTMENTAL COURSE OFFERINGS: PHILOSOPHY (Course Prefix PH)

250

INTRODUCTION TO PHILOSOPHY

201 A survey of the basic problems of philosophy and the alternative solutions as represented in the thought of the more significant Western philosophers. 3 sh. (Fall, Spring).

LOGIC I

202 A course designed to study the methods used to distinguish correct from incorrect reasoning. It will aim at developing (1) an ability to express one's ideas clearly and concisely, (2) an increased skill in defining one's terms, and (3) a capacity to formulate arguments vigorously and to scrutinize them critically. 3 sh.

LOGIC II

203 This course will treat symbolic logic from two points of view: (1) it will present the standard notations, methods and principles of symbolic logic for use in determining the validity of arguments, and (2) it will systematically examine these logical

principles themselves. Recommended for students who have had an introduction to logic or who have a mathematical background. 3 sh.

ANCIENT PHILOSOPHY

251 A study of the development of Greek Philosophy. The texts discussed will be taken from the work of the pre-Socratics, Plato, Aristotle and Plotinus. Smith. 3 sh.

MEDIEVAL THOUGHT

252 A study of the major contributions of medieval thought to the Western heritage. The course will try to show the various ways theological, philosophical, and artistic elements interwove to constitute the fabric of medieval culture. A major goal will be to determine the relevance of elements of medieval culture to present day concerns and issues. Innis. 3 sh.

PHILOSOPHY AND THE 20th CENTURY

254 A study of the philosophical importance and relevance of various views and alternatives concerning man, society, art, and religion in

the 20th century. The goal of the course is to construct an intellectual map of the period under discussion. Readings will include novels, plays, and essays in addition to philosophical works. Innis. 3 sh.

ORIENTAL PHILOSOPHY

- 261 An examination of the major philosophical and moral ideas of India, China, and Japan as expressed in art, literature, and religion. 3 sh.

LAW AND MORALITY

- 281 This course will first try to determine what (308) the main aspects of a legal system are and what distinctive role law plays in the life of the community. An attempt will then be made to clarify some of the moral problems that surround the relationship of the individual to the legal establishment: for example, loyalty and civil disobedience. 3 sh.

POLITICAL THEORY: PLATO-MARCUSE

- 282 Revolutionary and conservative tendencies (309) in the history of political philosophy will be compared and their development traced. Plato, Aristotle, Hobbes, Locke, Rousseau, Hegel, Marx, Lenin, Burke, and Marcuse will be considered. Smith. 3 sh.

PHILOSOPHY OF MIND AND PERSONALITY

- 283 The goal of the course is to construct a comprehensive view of the person by considering the bodily, emotional affective, and intellectual aspects of the individual and by relating a philosophical account of these elements to various psychological theories. 3 sh.

PHILOSOPHIES OF ART AND BEAUTY

- 284 This course will examine the views of major philosophers on the beautiful and the nature of artistic creativity. Among others, Plato, Aristotle, Augustine, Hegel, Nietzsche and

Dewey will be considered. An attempt will be made to correlate the views of these thinkers with the works of poets, artists, and composers and the statements the latter have made about their work. Smith. 3 sh.

THEORY OF KNOWLEDGE

- 301 The course will be concerned with a thorough (302) description of the various ways man knows and expresses his knowledge. The development of the knowing processes in the individual and the race will also be examined and the differences and relations between the various ways of knowing will be discussed. The goal of the course is a comprehensive view of the structure of the human mind and its operations. Innis. 3 sh.

INTRODUCTION TO ETHICS

- 302 An introduction to the major areas of ethical inquiry with an emphasis on moral obligation, character and duty, punishment, egoism, the good life. Historical and geographical differences in morality will be discussed, especially as they relate to contemporary problems concerning the relationships between people. Lyons. 3 sh.

PHILOSOPHY OF HISTORY AND CULTURE

- 303 The course will be concerned with (a) the nature of man and his possibilities as shown in history, (b) the historical character of his knowledge, (c) the central values, ideas, and meanings according to which man has constructed his history. Innis. 3 sh.

PHILOSOPHY OF RELIGION

- 304 The course will be concerned with both (305) historical and systematic topics in philosophy of religion: (a) the origin of the idea of God, (b) the nature of religion and the types of religious experience, (c) the nature of religious language, (d) proofs for God's existence, (e) God's relation to the world and history. Innis. 3 sh.

PHILOSOPHY OF LANGUAGE

- 305 The course will treat, from a philosophical perspective, such topics as (a) the origin of language, (b) the structure and function of language, (c) the nature of symbols, (d) the specific relations between language and thought and language and reality, (e) the nature of meaning. The concern will be to construct a notion of language adequate to all its aspects. Innis. 3 sh.

PHILOSOPHY AND RADICAL THEOLOGY

- 306 A study of the role played by Pascal, Kierkegaard, Nietzsche, Heidegger, Buber, and Gadamer in the revolution in theological thinking in Germany. Bultmann, Tillich, Brunner, Bonnhoffer, and Ebeling will be considered, and the philosophical presuppositions of their thought brought to light. Smith. 3 sh.

252 MAN, MEDICINE, AND MORALITY

- 307 This course will emphasize those arguments which are used to justify moral decisions which confront medicine specifically and the public generally. The problems of drugs and personality alteration, artificial insemination, euthanasia, sterilization, truth and the patient, contraception, poverty and medical care, abortion, genetic engineering, and transplantation will be discussed as they relate to the problems of human values and moral obligation. Lyons. 3 sh.

PHILOSOPHY OF SCIENCE

- 308 This course will examine the procedures and basic concepts and assumptions of modern science. An attempt will be made to relate science to the humanities and to show that the ability to think in scientific terms is part of what is distinctive about being human. 3 sh.

TOPICS IN AMERICAN PHILOSOPHY

- 352 The ideas of W. James, J. Dewey, F. Hayek, C. Rogers, B.F. Skinner, and G. Santayana will be discussed as they relate to the problem of freedom and its political and moral implications. Lyons. 3 sh.

EXISTENCE AND ANXIETY

- 353 A survey of existential philosophy and literature with reference to the traditional philosophy which existentialism calls into question. Kafka, Camus, Buber, Rilke, and Nietzsche will be discussed. Smith. 3 sh.

ANALYTICAL PHILOSOPHY

- 354 This course will attempt to explain and evaluate the main assumptions and methods of contemporary analytic philosophy. It will also consider how these methods can be applied to traditional philosophical problems; for example, the nature of the self, the relation of the individual to the world, and the status of the belief in God. 3 sh.

HAGEL AND GERMAN IDEALISM

- 355 An explication of Hegel's *Phenomenology of Mind*. As an introduction, the development of German Idealism will be traced and an attempt made to understand the *Phenomenology of Mind* as an outgrowth of the problems raised by Kant and Fichte. Smith. 3 sh.

DIRECTED STUDIES IN PHILOSOPHY

- 491 The student through regular and frequent consultation with his instructor pursues a special problem in philosophy, the results of which are presented in a significant paper. Prerequisite: Permission of instructor. 3 sh. (By arrangement).

ADVANCED TUTORIAL IN PHILOSOPHY

495 A program of directed studies which affords the advanced student with an additional opportunity to pursue a previously explored problem in greater depth or to initiate an additional problem. The purpose is to sharpen and refine techniques for scholarly research and presentation. Prerequisite:

Demonstrated proficiency in an area selected for directed studies and permission of instructor. 3 sh. (By arrangement).

Special reference is made to FE 301 - Philosophy of Education, which may be credited to the Philosophy concentration.



PHYSICAL EDUCATION

Ignatius Ciszek, Chairman
Department of Physical Education

The Department of Physical Education provides basic course sequences in physical education, the aims of which are the development of an appreciation of the value of intelligent participation in motor activities and the maintenance of sound habits of physical activity. Physical Education programs for men and women are complemented by those activities sponsored by the Men's Athletic Association and the Women's Recreational Organization. In addition to the facilities of the College, the Department of Health and Physical Education also utilizes the physical education facilities of Lowell Technological Institute. The Department is interested in serving the individual needs of all students and whenever possible will make the College facilities available to individuals or groups for physical activities. Interested students should consult members of the Department for scheduling individual or intra-mural activities. A minimum of one year of required physical education must be completed by each student (subject to the exceptions specified by the Uniform College Requirements). Students are advised that graduation will be denied to those students who fail to satisfy the physical activities requirement by the end of their senior year.

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DEPARTMENTAL COURSE OFFERINGS: **PHYSICAL EDUCATION (Course Prefix PE)**

PHYSICAL EDUCATION FOR MEN I

001 Physical education for men is devoted to the attainment of physical fitness through gymnastics and team sports. Ciszek. No Credit. (Fall)

PHYSICAL EDUCATION FOR MEN II

002 This course provides increased loads of physical activities which center around body mechanics, tumbling, wrestling, weight-lifting, and team activities. Ciszek. No Credit. (Spring)

PHYSICAL EDUCATION FOR WOMEN I

001 This course seeks to develop organic vigor, agility, balance, flexibility, coordination, and efficient body movement through body conditioning exercises and team activities. Legault, Chamberlain. No Credit. (Fall)

PHYSICAL EDUCATION FOR WOMEN II

002 This course encourages daily regimen of activities through individual performance of various levels of physical fitness. A program of rhythms is offered with emphasis upon square dancing, folk dancing, and group activities. Chamberlain, Legault. No Credit. (Spring)



SCIENCE

Ethel Kamien, Chairman
Department of Biological and Physical Sciences

George Carr, Director
Environmental Science Program

Joseph Farina, Director
Medical Technology Program

The Department of Biological and Physical Sciences offers major concentrations in Biology and Environmental Science leading to Bachelor of Arts and Bachelor of Science degrees and a supporting concentration in Chemistry for students who can arrange a second concentration. The Department also offers a specialization in Medical Technology leading to the Bachelor of Science degree and minor areas of study in Biology, Chemistry, Earth Science, and General Science.

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Biology Concentration

The Biology concentration is designed to provide a broad background in the various biological sciences. Baccalaureate programs may be developed according to several options and permit varying combinations of related courses in both science and non-science areas. Students who are interested in graduate study in Biology are advised to take course work in Chemistry beyond the basic prescribed program and to develop a minor area or a supporting second concentration in Chemistry. A concentration in Biology consists of 39-45 semester hours and must include the following courses:

1. BI 201-202--Principles of Biology and
BI 203-204--Principles of Biology Laboratory
2. BI 305--Developmental Biology
3. BI 307--Experimental Morphogenesis
4. BI 308--Cell Biology
5. BI 311--Principles of Ecology
6. BI 321--General and Comparative Physiology

7. BI 332--Genetics and
BI 334--Genetics Laboratory
8. BI 409--Senior Science Seminar
9. BI 419--Principles of Evolution
10. BI 422--Plant Physiology and
BI 424--Plant Physiology Laboratory
11. BI 432--General Microbiology

Biology concentrators must evidence proficiency in mathematics at the level of MA 107--Introduction to Calculus prior to the beginning of the junior year. Students electing a minor in Chemistry are required to evidence proficiency in mathematics at the level of MA 201--Calculus I prior to initiating CH 323--Analytical Chemistry I. Biology concentrators must also complete a minimum of two semesters of Chemistry and two semesters of Physics.

Students intending to pursue teaching careers at the secondary level may apply to the Secondary Education program in Science Education at the end of their sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" and "Curriculum Requirements for Secondary Education Programs" which appear elsewhere in this catalogue under the heading for Education. Biology concentrators who are admitted to the program in Science Education are required to take BI 301-302--Laboratory Practicum in addition to the previously specified course work in Biology and related science areas.

Students transferring to the College and wishing to concentrate in Biology must make individual arrangements with the Chairman of the Department regarding satisfaction of underclass requirements.

Environmental Science Concentration

A concentration in Environmental Science will prove useful for students planning to teach in elementary or secondary schools, to pursue graduate work in environmental studies and allied fields, and to enter environmentally oriented careers in business, government, and industry. Degree programs of the College permit students to supplement their concentration in Environmental Science through many minor areas of study and through a related study option consisting of non-science courses of special concern to environmental problems. Students who are interested in the technical aspects of environmental science and who contemplate graduate study are advised to undertake the program

option which provides a minor area of study in Chemistry. Students preparing for public service careers and for business and industrial employment are advised to develop individual programs suitable to their employment goals in consultation with the Director of the Environmental Science program. Concentrators in Environmental Science who have also pursued the program in Elementary Education will have the necessary background to provide leadership in science education, to assist science coordinators with in-service programs for other teachers, and to participate in team-teaching situations as science resource instructors. Qualified students who plan to teach in the lower grades of the secondary school may undertake a program which combines the Environmental Science Concentration with the teacher-education program in Science Education. A concentration in Environmental Science consists of 33-45 hours of course work and must include the following:

1. ES 101--Introduction to Environmental Sciences
2. GL 201-202--General Geology
3. GL 313-314--Environmental Geology
4. GL 303--Oceanography or BI 215--Aquatic Biology
5. BI 311--Principles of Ecology
6. BI 412--Human Ecology
7. PY 332--Meteorology

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In addition to the above required courses, concentrators in Environmental Science must elect a minimum of one course from the following listing:

BI 215--Aquatic Biology
BI 231--Clinical Microbiology
BI 214--Elements of Evolution
BI 419--Principles of Evolution
CH 225--Environmental Chemistry
GL 301--Mineralogy
GL 302--Structural Geology
GL 303--Oceanography
GL 401--Petrology
GL 308--Paleontology
PY 215-216--Astronomy

In addition to the courses undertaken for the concentration, students in Environmental Science programs must complete the following courses in mathematics and related sciences.

1. MA 107--Introduction to Calculus and
MA 201--Calculus I or
MA 206--Elementary Statistical Analysis
2. BI 101-102--Life Science and
BI 103-104--Life Science Laboratory or
BI 201-202--Principles of Biology and
BI 203-204--Principles of Biology Laboratory
3. CH 111-112--General Chemistry or
CH 201-202--Principles of Chemistry and
CH 207-208--Principles of Chemistry Laboratory
4. PY 103-104--General Physics or
PY 201-202--Principles of Physics

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Students intending to pursue teaching careers at the elementary or secondary levels may apply to appropriate teacher-education programs at the end of their sophomore year. Such students are advised that admission to professional teaching programs is by petition only. For further information concerning teaching programs, consult the "Academic Policies Concerning Teacher-Education Programs" which appear elsewhere in this catalogue under the heading for **Education**. Students who anticipate application to the program in Elementary Education should consult the "Course of Study for Elementary Education and Environmental Science" and plan their programs accordingly. Environmental Science concentrators who plan to apply for the Secondary Education program in Science Education should consult the "Curriculum Requirements for Secondary Education Programs" and the Director of Science Education to insure that necessary prerequisite course work has been undertaken prior to the specified application dates. Students planning to petition for admission to teacher-education programs are required to take ES 301-302--Environmental Science Practicum. Students who have been admitted to the Secondary Education program in Science Education are also required to take BI 409--Senior Science Seminar and ES 401--Environmental Science Seminar.

Students transferring to the College and wishing to concentrate in Environmental Science must make individual arrangements with the Director of the Environmental Science program regarding satisfaction of underclass requirements.

Medical Technology Specialization

Students interested in the Medical Technology major pursue a basic science program with Biology concentrators during the freshman and sophomore years and have until the end of the junior year to determine choice of programs. Students admitted to the Medical Technology specialization spend three years on campus and the senior year of clinical training in an affiliated hospital school of medical technology. Students interested in the Medical Technology program are advised that admission to baccalaureate study at the College does not guarantee admission to the year of clinical training. As prerequisites for admission to the clinical year, a student must have completed the Uniform College Requirements and prescribed courses in Biology and Chemistry with a grade-point average of 2.00 or better.

Qualified candidates for the Medical Technology program must submit a formal application to Dr. Farina, the Director of Medical Technology, in order to receive consideration for the clinical year of training in an affiliated hospital school of medical technology. This application must be completed prior to the end of the first semester of the junior year and should set forth the reasons for seeking admission to the clinical program, should include a summary of any clinical experience, and should specify any other pertinent information which may be useful in evaluating the applicant's motivation and commitment to the medical technology profession. Students who plan to transfer to the College at the end of their sophomore year should declare their intention of seeking admission to the Medical Technology program at the time of their application. Transfer students may not be admitted to the clinical year unless they have completed one year of full-time studies at the College immediately prior to the clinical year.

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Students pursuing the core science program for Biology and Medical Technology are required to evidence proficiency in mathematics at the level of MA 107--Introduction to Calculus I prior to the beginning of the junior year. Medical Technology candidates are required to evidence proficiency in mathematics at the level of MA 201--Calculus I prior to initiating CH 323--Analytical Chemistry and at the level of MA 202--Calculus II prior to initiating CH 361--Physical Chemistry I. Students anticipating application to the Medical Technology program are advised that the following course work must have been completed prior to the clinical internship.

1. Biology

BI 201-202--Principles of Biology
 BI 203-204--Principles of Biology Laboratory
 BI 305--Developmental Biology
 BI 307--Developmental Biology Laboratory
 BI 308--Cell Biology
 BI 325--Human Physiology
 BI 432--General Microbiology
 Biology Elective at "300" or "400" levels

2. Chemistry *

CH 201-202--Principles of Chemistry
 CH 203-204--Principles of Chemistry Laboratory
 CH 251-252--Organic Chemistry
 CH 257-258--Organic Chemistry Laboratory
 CH 323--Analytical Chemistry or CH 361--Physical Chemistry and
 CH 367--Physical Chemistry Laboratory
 CH 321--Biochemistry

* Because a minimum of 16 semester hours of Chemistry is required by the Registry of Medical Technologists of the American Society of Clinical Pathologists and admission to the Hospital School of Medical Technology is highly competitive, students are advised to complete the above Chemistry sequence as a minor area of study.

3. Physics

PY 201-202--Principles of Physics

4. Medical Technology

MT 201--Introduction to Medical Technology

After completion of all prerequisite courses and after approval of his application for the clinical year, the student will be granted permission to register for clinical course work in an affiliated hospital school of medical technology. The College is presently affiliated with the following hospitals for the clinical experience of the Medical Technology program: the Boston Veterans Administration Hospital, the Burbank Hospital, the Lawrence General

Hospital, and Saint Vincent's Hospital. During the clinical year of 52 weeks, the student will receive both theoretical and practical laboratory training. Course work for the year of clinical internship consists of the following:

- MT 401--Microbiology
- MT 402--Clinical Chemistry
- MT 403--Hematology
- MT 404--Immunohematology

Grades for the clinical internship will be submitted by the Educational Coordinator of the affiliated hospital to the Director of the Medical Technology program at the end of each rotation. Members of the Medical Technology Committee will consult with the hospital school instructors periodically concerning the progress of each student throughout his internship. The Director of the Medical Technology program assumes the responsibility of educational consultant to each hospital and transmits official grade reports to the Registrar of the College. Such grades are entered on the student's permanent record card and are computed in the baccalaureate grade-point average. Students who successfully complete the clinical internship are eligible to take the qualifying examination which is administered by the Registry of Medical Technologists of the American Society of Clinical Pathologists for certification in Medical Technology.

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Minor Areas of Study

Minor areas of study consist of 18-24 semester hours of course work and must be developed in accordance with the following recommendations or requirements.

1. Minor in Biology

A minor in Biology consists of 18 hours of courses exclusive of any course work taken to satisfy the Laboratory Science Requirement (Area IV). Any Biology course offered by the Department may be elected for the minor provided that prerequisites as stated in the catalogue are satisfied. Students minoring in Biology must present a minimum of 6 semester hours of Biology courses which are on or above the "300" level and four courses in Biology which carry laboratory requirements.

2. Minor in Chemistry

A minor in Chemistry consists of 24 semester hours of course work exclusive of

any course work taken to satisfy the Laboratory Science Requirement (Area IV). All course prerequisites as stated in the catalogue must be satisfied. The required courses for the Chemistry minor is as follows:

CH 201-202--Principles of Chemistry
CH 207-208--Principles of Chemistry Laboratory
CH 251-252--Organic Chemistry
CH 257-258--Organic Chemistry Laboratory

An additional two courses, of which at least one must be a quantitative Chemistry course (CH 323, 361, and 362), must be selected from the following:

CH 225--Environmental Chemistry
CH 324--Biochemistry
CH 361--Physical Chemistry I and CH 367--Physical Chemistry Laboratory I
CH 362--Physical Chemistry II and CH 368--Physical Chemistry Laboratory II

3. Minor in Earth Science

A minor in Earth Science consists of 18-24 semester hours of course work exclusive of courses taken to satisfy the Laboratory Science Requirement (Area IV). and distributed as follows:

a. Required Survey Course

GL 201-202--General Geology

b. Two courses selected from the following:

GL 301--Mineralogy
GL 302--Structural Geology
GL 313--Environmental Geology I
GL 314--Environmental Geology II
GL 401--Petrology
GL 403--Paleontology

c. Two additional courses selected from "b" above or two courses from the following:

BI 211--Ecology and the Environment
BI 215--Aquatic Biology
GE 234--Human Geography
GL 303--Oceanography
PY 215--Astronomy I
PY 216--Astronomy II
PY 332--Meteorology

4. Minor in General Science

A minor in General Science consists of a minimum of 18 semester hours of course work exclusive of any courses taken to satisfy the Laboratory Science Requirement (Area IV) and distributed as follows:

- a. Course work must be elected in three of the following sciences: Biology, Chemistry, Geology, Physical Science.
- b. A minimum of three courses must be taken in one of the sciences, two courses in a second science, and one course in a third science.
- c. A minimum of 6 semester hours must be taken on or above the "300" course-level.
- d. Any specified prerequisite for a course selected for the minor must be satisfied prior to its election.
- e. A minimum of four courses of the minor program must carry laboratory requirements.

In selecting course work offered by the Department of Science, all students should note that credit may not be granted for courses which cover the same basic content. Specifically, credit may not be granted for more than one course in the following course groupings:

BI 101 and 201; BI 102 and 202; BI 211 and 311; PY 101, 103, and 201;
PY 104 and 202; CH 102, 111, and 201; CH 112 and 301; PY 111 and 212;
PY 112 and 212.

DEPARTMENTAL COURSE OFFERINGS: I BIOLOGY (Course Prefix BI)

LIFE SCIENCE I * +

101 An introduction to the study of biology which considers the earth's environment as a community in which plants and animals live, interact, and demonstrate the variations which enable them to adapt to changes and to evolve. Man's roles as producer, consumer, polluter and conserver will receive attention. Two lectures per week. Corequisite: BI 103. Biology staff. 2sh. (Fall, Spring).

LIFE SCIENCE II * +

102 The emphasis in this course will be on the

basic nature and structure of all living things, their roles as producers and consumers, their inheritance, the various ways plants and animals have solved life's problems, and man's life as an animal. Two lectures per week. Corequisite: BI 104. Biology staff. 2sh. (Fall, Spring).

LIFE SCIENCE LABORATORY I

103 Laboratory work associated with BI 101. One two-hour lab per week. Corequisite: BI 101. Biology staff. 1sh. (Fall, Spring).

*Course may be counted for Area IV (Laboratory Science).

LIFE SCIENCE LABORATORY II

104 Laboratory work associated with BI 102. One two-hour lab per week. Corequisite: BI 102. Biology staff. 1sh. (Fall, Spring).

+BI 101 and 102 may be taken under the Keller Plan or self-paced method of instruction. The subject matter is divided into a series of study guides and unit tests. The student advances to a new unit when he has passed the test on the preceding unit. Student tutors aid the student throughout the semester. BI 103 and 104 must be taken in regular laboratory sections by all students electing BI 101 and 102 through the Keller Plan.

PRINCIPLES OF BIOLOGY I *

201 Fundamental principles of biology which (105) emphasize the unity and diversity of living organisms. Three lectures per week. Corequisite: BI 203. Protopapas. 3 sh. (Fall).

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PRINCIPLES OF BIOLOGY II *

202 Continuation of an inquiry into the (106) fundamental principles of biological relationships of living organisms: their structure, function, growth, differentiation, reproduction, and relation to their environment. Three lectures per week. Corequisite: BI 204. Protopapas. 3 sh. (Spring).

PRINCIPLES OF BIOLOGY LABORATORY I *

203 Laboratory work associated with BI 201. One (107) three hour laboratory per week. Corequisite: BI 201. 1 sh. (Fall).

PRINCIPLES OF BIOLOGY LABORATORY II *

204 Laboratory work associated with BI 202. One (108) three hour laboratory per week. Corequisite: BI 202. 1 sh. (Spring).

ECOLOGY AND THE ENVIRONMENT

211 A study of local environmental areas with emphasis on the types and interdependence of the constituent organisms. Field trips, directed reading, individual projects to be presented in class and group discussions are integral parts of the course. Two lectures and one two-hour laboratory per week. Prerequisites: BI 101 and 102. Lyon. 3 sh. (Fall, 1972 and alternate years by demand).

ELEMENTS OF EVOLUTION—

214 A study of the evidence and process of evolution, its philosophical aspects, and its impact on human thought. Behavioral, ecological, and genetical considerations will be emphasized. The course concludes with the study of human evolution. Three lectures per week. Lee. 3 sh. (Spring by demand).

AQUATIC BIOLOGY

215 An introduction to the physical and biological factors in aquatic environments with major consideration given to marine life. Emphasis is on the flora and fauna of New England. Two lectures and two hours of laboratory per week plus several field trips. Hinckley. 3 sh. (Spring).

VERTEBRATE BIOLOGY

218 This course is designed primarily for the non-science major. The course includes the classification and structure of major vertebrate groups, from fish through mammals (including problems of extinction), and the importance of vertebrates to man. Of specific interest is the study of the endangered species within each group and general problems of conservation. Two hours of lecture and two hours of laboratory per week. Shepherd. 3 sh. (Spring by demand).

+*Course may be counted for Area IV (Laboratory Science).

INTRODUCTION TO THE BIOLOGICAL SCIENCES

- 221 Basic laboratory procedures and professional aspects of the biological sciences. Career opportunities will be emphasized through discussions, demonstrations, field trips, visiting lecturers, and selected readings. 1 sh. (Fall, Spring).

PHYSIOLOGIC INSTRUMENTATION

- 222 A course designed to present a broad spectrum of mammalian physiology as well as basic and applied electronics. Fundamental principles will be discussed as a basis for understanding the interrelationship of the various systems in man. Two lectures and three hours of laboratory per week. Prerequisite: BI 102. Farina. 3 sh. (Spring).

ANATOMY AND PHYSIOLOGY I

- 223 A study of the human organism relating structure and function. Among the topics treated are cytology, histology, skeletal system, muscular system, nervous system, circulatory system, and endocrine system. Three lectures per week. Prerequisite: CH 111. Corequisite: CH112, BI 225. Farina, 3 sh. (Fall).

ANATOMY AND PHYSIOLOGY II

- 224 A continuation of BI 223, which is a prerequisite, and including a study of the respiratory, nervous, digestive, excretory, and reproductive systems of man. Three lectures per week. Corequisite: BI 226. Farina. 3 sh. (Spring).

ANATOMY AND PHYSIOLOGY LABORATORY I

- 225 Laboratory investigations to be performed in conjunction with BI 223. Corequisite: BI 223. One three-hour laboratory per week. Farina, Shepherd. 1 sh. (Fall).

ANATOMY AND PHYSIOLOGY LABORATORY II

- 226 Laboratory investigations to be performed in conjunction with BI 224. Corequisite: BI 224. One three-hour laboratory per week. Farina, Shepherd. 1 sh. (Spring).

CLINICAL MICROBIOLOGY

- 231 The isolation, cultivation, and identification of micro-organisms of medical importance to man. Prerequisite: CH 112. Three lectures and two one and a half hour laboratories per week. Lam. 4 sh. (Fall, Spring).

LABORATORY PRACTICUM I

- 301 Through observation, preparation of material and presentation of demonstrations in BI 103 laboratories, the student becomes familiar with the materials and teaching-learning situations in the biological sciences. Hinckley and Biology staff. 1 sh. (Fall).

LABORATORY PRACTICUM II

- 302 A continuation of BI 301, with students assigned to BI 104 laboratories. Hinckley and Biology staff. 1 sh. (Spring).

DEVELOPMENTAL BIOLOGY

- 305 Embryology is presented as a single science, (233) integrating morphological and experimental physiological approaches for an understanding of the ontogenetic development of organisms. An introduction to the molecular biology of development is also presented. Two lectures per week. Prerequisite: One year of biology. Corequisite: BI 307. Protopapas. 2 sh. (Fall).

EXPERIMENTAL MORPHOGENESIS

- 307 Lectures include discussion of experimental design and analysis, with emphasis on the critical experiments of developmental biologists as models of inductive reasoning. Laboratory investigations deal with

problems of cellular differentiation and organogenesis, utilizing techniques of both classical experimental embryology and modern developmental biology. Corequisite: BI 305. One lecture and three hours of laboratory per week. Osmolski. 2 sh. (Fall).

CELL BIOLOGY

308 A study of the structure and function of living (234) matter at the cellular level of organization.

Both biological statics and dynamics are considered with emphasis on the control systems involved with chemical energy transformations, membrane phenomena, and protein synthesis. Prerequisite: One year of biology and one year of chemistry. Three lecture and three laboratory hours per week. Osmolski. 4 sh. (Spring).

PRINCIPLES OF ECOLOGY

311 A study of the interrelationships of organisms with their environment and including field work, individual projects, and discussions of current trends and techniques in ecology and conservation. Prerequisite: BI 202. Two lectures and one four-hour laboratory per week. Lyon. 4 sh. (Fall).

GENERAL AND COMPARATIVE PHYSIOLOGY

321 A course which seeks to investigate, describe and systematize a variety of basic mechanisms of the animal and plant kingdoms and to establish the general principles of functional mechanisms that underlie the life processes of all organisms. Prerequisites: BI 308, one year of chemistry, and one year of physics. Three hours of lecture and three hours of laboratory per week. Farina. 4 sh. (Spring).

HUMAN PHYSIOLOGY

325 An introduction to the human organism utilizing the unifying concepts of general and cellular physiology. Systems treated include the cardiovascular, respiratory, digestive,

excretory, nervous, endocrine, and musculoskeletal. Prerequisite: One year of biology, chemistry, and physics. Three lecture and three laboratory hours per week. Farina. 4 sh. (Fall).

COMPARATIVE VERTEBRATE ANATOMY

326 A study of the basic similarities and (226) differences of organ systems in the vertebrates, with reference to the fields of embryology, histology, and paleontology. Representative vertebrates are studied in the laboratory. Prerequisite: BI 201-202 or equivalent. Two lectures and one four-hour laboratory per week. Shepherd. 4 sh. (Spring by demand).

HISTOLOGY

328 An introduction to the microscopic structure (228) of animal tissue with emphasis upon human histology. Laboratory investigation is an integral part of the course. Prerequisite: BI 201-202 or equivalent. Two lectures and one three-hour laboratory per week. Shepherd. 4 sh. (Spring by demand).

GENETICS

332 The theories of both classical and molecular genetics are explored with special emphasis on chromosome mechanics and the nature of the gene. Prerequisite: Two semesters of College Chemistry. Corequisite: BI 334. Two lectures per week Osmolski. 2 sh. (Spring).

GENETICS LABORATORY

334 Laboratory investigations of the transmission and expression of morphological and physiological characters in both diploid and eukaryotic organisms. Corequisite: BI 332. Three hours of laboratory per week. Osmolski. 1 sh. (Spring).

SENIOR SCIENCE SEMINAR

409 Selected topics in biology will be treated in

depth through directed readings, discussions, and student reports. Prerequisite: Senior status as a biology concentrator. Protopapas. 2 sh. (Fall).

HUMAN SEXUALITY

- 351 Lectures and discussions concerning the biological aspects of human sexuality. Topics include the anatomy and physiology of the reproduction system, sexual development, maleness and femaleness, contraception, abortion, errors, and problems. Three lecture-discussions per week. Kamien, Hinckley. 3 sh. (Fall by demand).

HUMAN ECOLOGY

- 412 A course designed to reveal the increasing problems of over-population in regard to environmental deterioration, living space, limits of natural resources, and the adverse effects of man's destruction and alteration of the environment. Laboratory techniques will be utilized in pollution determinations. Prerequisite: BI 102 or equivalent. Lyon. 3 sh. (Spring).

PRINCIPLES OF EVOLUTION

- 419 A study of the concepts and mechanisms of evolution. Lee. 2 sh. (Fall).

PLANT PHYSIOLOGY

- 422 A critical study of the physiological processes which occur in living plants, with emphasis on the angiosperms. Topics emphasized are growth and development, water relations, mineral nutrition, respiration, photosynthesis, and nitrogen metabolism. Prerequisite: BI 308 (or equivalent), one year of chemistry, and one year of physics. Corequisite: BI 424. Three lectures per week. Kamien. 3 sh. (Spring).

PLANT PHYSIOLOGY LABORATORY

- 424 Laboratory work associated with BI 422.

Four hours of laboratory per week. Corequisite: BI 422. Kamien. 1 sh. (Spring).

GENERAL MICROBIOLOGY

- 432 A study of the morphology, development, and physiology of bacteria and other micro-organisms. Emphasis is on such fundamental techniques as isolation, cultivation, and observation. Prerequisite: One year of chemistry and one year of biology. Three lectures and two laboratories per week. Lam, Eberiel. 4 sh. (Spring).

DIRECTED STUDIES IN BIOLOGY

- 491 The student through regular and frequent consultation with his instructor pursues a special problem in biology, the results of which are presented in a significant paper. Prerequisite: Permission of instructor. 3 sh. (By arrangement).

ADVANCED TUTORIAL IN BIOLOGY

- 495 A program of directed studies which affords the advanced student with an additional opportunity to pursue a previously explored problem in greater depth or to initiate an additional problem. The purpose is to sharpen and refine techniques for scholarly research and presentation. Prerequisite: Demonstrated proficiency in an area selected for directed studies and permission of instructor. 3 sh. (By arrangement).

Special reference is made to CH 221--Nutrition and to CH 324--Biochemistry which may be credited to biology concentrations and minors.

II CHEMISTRY (Course Prefix CH)

CHEMICAL IDEAS *

- 102 A broad view of chemistry covering topics of general interest. Designed to acquaint students with the fundamental principles of

*Course may be counted Area IV (Laboratory Science).

chemistry and their applications to current concerns. Two lectures and one two-hour laboratory per week. 3 sh. (Spring).

GENERAL CHEMISTRY I *

111 A survey of the principles of inorganic chemistry. The structure of matter, the quantitative aspects of chemical reactions, and solution chemistry, including acid-base theory and equilibrium. Two lectures, one recitation, and one three-hour laboratory per week. 4 sh. (Fall, Spring by demand).

GENERAL CHEMISTRY II *

112 A survey of the basic principles of organic chemistry and biochemistry with carbohydrate metabolism treated in detail. Prerequisite: CH 111 or permission of instructor. Two lectures, one recitation, and one three-hour laboratory per week. 4 sh. (Spring; Fall by demand).

PRINCIPLES OF CHEMISTRY I *

201 Presentation of chemistry as a quantitative (121) experimental science, developing basic chemical concepts and their mathematical relationships. Corequisite: CH 207. 3 sh. (Fall).

PRINCIPLES OF CHEMISTRY II *

202 A continuation of CH 201. Corequisite: CH (122) 208. Prerequisite: CH 201 or 111 with permission of instructor. 3 sh. (Spring).

PRINCIPLES OF CHEMISTRY LABORATORY I *

207 An introduction to the basic laboratory (127) techniques based on qualitative and quantitative chemical procedures. Corequisite: CH 201. 1 sh. (Fall).

PRINCIPLES OF CHEMISTRY LABORATORY II *

208 Systematic qualitative analysis of inorganic (128) compounds with emphasis on the theory of

equilibrium and semi-micro laboratory technique, and a continuation of quantitative techniques. Prerequisite: CH 207. Corequisite: CH 202. 1 sh. (Spring).

NUTRITION

221 The biochemistry of food, including the chemical constitution of foods and the metabolic processes which accompany the digestion, absorption, and biosynthesis of the fundamental molecules of living tissue. Two lectures and one three-hour laboratory per week. Prerequisite: CH 112 or equivalent. 3 sh. (Fall by demand).

ENVIRONMENTAL CHEMISTRY

225 A study of the inorganic, organic, and biochemical composition and interrelationship of our water, land, and atmospheric environment. Prerequisite: CH 112 or 252. 3 sh. (Fall).

ORGANIC CHEMISTRY I

251 The basic principles and reactions which (202) characterize the behavior of carbon compounds. Emphasis is on broad aspects of theory by which the facts of organic chemistry can be deduced. Prerequisite: CH 202. Corequisite: CH 257. Tanner. 3 sh. (Fall).

ORGANIC CHEMISTRY II

252 A continuation of CH 251, which is a (203) prerequisite. Corequisite: CH 258. Tanner. 3 sh. (Spring).

ORGANIC CHEMISTRY LABORATORY I

257 Techniques, skills, and heuristic approaches (207) involved in the synthesis, purification, and identification of organic compounds. Prerequisite: CH 202. Corequisite: CH 251. Tanner. 1 sh. (Fall).

*Course may be counted for Area IV (Laboratory Science).

ORGANIC CHEMISTRY LABORATORY II

258 A continuation of CH 257, which is a (208) prerequisite. Corequisite: CH 252. Tanner. 1 sh. (Spring).

ANALYTICAL CHEMISTRY

323 The theories and application of classical and instrumental methods of analysis. Prerequisites: PY 202, MA 201, CH 202, and CH 208. Two lectures and six hours of laboratory per week. 4 sh. (Spring).

BIOCHEMISTRY

324 The chemical constitution, function, and interrelationship of the molecules of living organisms will be considered. Emphasis is on the principles of molecular biology. Three lectures and one four-hour laboratory per week. Prerequisite: CH 252. 4 sh. (Fall).

LABORATORY PRACTICUM I

331 Assisting in the design, implementation, and instruction in the chemistry laboratories. Prerequisite: Permission of instructor. 1 sh. (Fall).

LABORATORY PRACTICUM II

332 A continuation of CH 331. Prerequisite: Permission of instructor. 1 sh. (Spring).

PHYSICAL CHEMISTRY I

361 A study of the laws governing physical and chemical changes. Included are thermodynamics, thermochemistry, properties of solutions, chemical and phase change equilibria and kinetics. Prerequisite: PY 202, MA 202, CH 202, CH 208. Corequisite: CH 367. 3 sh. (Fall; Spring by demand).

PHYSICAL CHEMISTRY II

362 A continuation of CH 361, which is a prerequisite. Electrochemistry, quantum theory, molecular structure, spectroscopy

and surface chemistry. Corequisite: CH 368. 3 sh. (Spring by demand).

PHYSICAL CHEMISTRY LABORATORY I

367 Experiments illustrating the principles discussed in CH 361. Prerequisites: PY 202, MA 202, CH 202, CH 208. Corequisite: CH 361. 1 sh. (Fall; Spring by demand).

PHYSICAL CHEMISTRY LABORATORY II

368 A continuation of CH 367, illustrating the principles discussed in CH 362. Prerequisite: CH 361, CH 367. Corequisite: CH 362. 1 sh. (Spring by demand).

III ENVIRONMENTAL SCIENCE

(Course Prefix ES)

INTRODUCTION TO ENVIRONMENTAL SCIENCES

101 A course designed to answer the questions: What do the environmental sciences include? How are they related to the traditional disciplines? What decisions do people make about environmental problems? Topics considered include air, water, thermal and noise pollution, solid and liquid waste disposal, and social, political and economic implications of the problems. Readings, discussions, guest speakers, and field trips will be utilized. 3 sh. (Fall).

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ENVIRONMENTAL SCIENCE PRACTICUM I

301 Through observation, preparation of materials, and presentation of demonstrations in introductory course laboratories, the student becomes familiar with the materials and teaching-learning situations in environmental science. Carr. 1 sh. (Fall).

ENVIRONMENTAL SCIENCE PRACTICUM II

302 A continuation of ES 301. Carr. 1 sh. (Spring).

ENVIRONMENTAL SCIENCE SEMINAR I

- 401 Selected topics in environmental science will be explored in depth through directed readings, discussions, and student reports. Prerequisite: senior status in environmental science concentration. 3 sh. (Fall).

ENVIRONMENTAL SCIENCE SEMINAR II

- 402 In depth exploration of selected topics in environmental sciences. The major goal is to produce integration of the principles and concepts developed in the various courses of the program. Prerequisite: senior status in environmental science concentration. 3 sh. (Spring).

DIRECTED STUDIES IN ENVIRONMENTAL SCIENCE

- 491 The student through regular and frequent consultation with his instructor pursues a special problem in environmental science, the results of which are presented in a significant paper. Prerequisite: Permission of instructor. 3 sh. (By arrangement).

ADVANCED TUTORIAL IN ENVIRONMENTAL SCIENCE

- 495 A program of directed studies which affords the advanced student with an additional opportunity to pursue a previously explored problem in greater depth or to initiate an additional problem. The purpose is to sharpen and refine techniques for scholarly research and presentation. Prerequisite: Demonstrated proficiency in an area selected for directed studies and permission of instructor. 3 sh. (By arrangement).

IV GEOLOGY (Course Prefix GL)

GENERAL GEOLOGY I *

- 201 A study of the Earth with emphasis on earth materials, earth structure (crustal and internal) earth history and the development of life. Gives the general student an understanding of the dynamic Earth and

provides a foundation for advanced work. Two hours of lecture, two hours of laboratory and field work. Gore, O'Brien. 3 sh. (Fall, Spring).

GENERAL GEOLOGY II *

- 202 A continuation of GL 201, with emphasis on the surface of the Earth and landform development. Includes special topics introducing the student to recent geological research and applied geological knowledge. Designed for the general and continuing student. Prerequisite: GL 201. Two hours of lecture, two hours of laboratory, and field work. Gore, O'Brien. 3 sh. (Spring).

MINERALOGY

- 301 An introduction to mineral identification and mineral structure with emphasis on laboratory determination. The course will examine the physical, chemical, and optical properties of minerals. Two hours of lecture and three hours of laboratory per week. Gore. 4 sh. (Fall by demand).

STRUCTURAL GEOLOGY

- 302 An analysis of crustal deformation through detailed study of geologic structures with emphasis upon the response of geologic materials to stress. Field techniques, tectonic principles, and three-dimensional analysis are employed. Two hours of laboratory and two hours of lecture per week. Prerequisite: GL 201. 3 sh. (Spring by demand).

OCEANOGRAPHY

- 303 An integrated approach to physical oceanography and submarine geology: environmental processes and sediments of shorelines, marine continental margins, and ocean basins, topography, structure, origin, and history of ocean basins with reference to tectonic relationships between ocean basins

* Course may be counted for Area IV (Laboratory Science).

and continents, chemistry and circulation patterns of oceanic waters. Prerequisite: GL 202. Two hours of laboratory and two hours of lecture per week. Eby. 3 sh. (Fall by demand).

PALEONTOLOGY

- 308 Nature and origin of fossils: their biology, (403) morphology, paleo-ecology, taxonomy, and evolutionary history. Special emphasis on the rule of fossils in geologic chronology and correlation. Two hours of lecture and four hours of laboratory per week. Prerequisite: GL 202, BI 102. 4 sh. (Spring by demand).

ENVIRONMENTAL GEOLOGY I

- 313 Designed to consider how the abundance, occurrence and distribution of natural resources and general geologic conditions limit the activities of man. Topics include: the energy gap, natural resource limits on food production and industrial expansion, pollution accompanying resource utilization, urban geology and geologic hazards in land development. Three lectures per week. Gore. 3 sh. (Fall by demand).

ENVIRONMENTAL GEOLOGY II

- 314 A focus on the environmental implications of the occurrence, distribution, and use of man's most important natural resource -- water. Topics will include surface water, methods of measurement, and impending shortages. Special emphasis is placed on the limitations imposed by hydrology. Three lectures per week. O'Brien. 3 sh. (Spring by demand).

PETROLOGY

- 401 Composition, classification, and origin of igneous, sedimentary, and metamorphic rocks. Emphasis will be on hand specimen identification and use of rock textures and compositions as guides to petrogenesis. Two hours of lecture and four hours of laboratory per week. Prerequisites: GL 201 and 301. 4 sh. (Fall by demand).

V MEDICAL TECHNOLOGY (Course Prefix MT)

INTRODUCTION TO MEDICAL TECHNOLOGY

- 201 Basic clinical laboratory procedures and professional aspects of medical technology. Discussions, demonstrations, field trips, visiting lecturers, and selected readings. Farina. 1 sh. (Fall, Spring).

MICROBIOLOGY

- 401 Clinical internship including lectures and supervised training in areas of bacteriology, parasitology, mycology, and virology. Emphasis is on methods of isolation and identification of specific disease - causing organisms. 8 sh.

CLINICAL CHEMISTRY

- 402 Clinical internship including lectures and supervised training in qualitative and quantitative analyses of body fluids useful in the diagnosis of physiologic abnormalities. Emphasis is on methods, quality control, and clinical interpretation. 8 sh.

HEMATOLOGY

- 403 Clinical internship including lectures and supervised training in principles of hemopoiesis and methods and techniques useful in diagnosis of specific blood dyscrasias. 8 sh.

IMMUNOHEMATOLOGY

- 404 Clinical internship including lectures and supervised training in principles of blood banking, serology, coagulation, and immunology. Emphasis is on genetic and immunologic qualities of blood, the blood group systems, compatibility testing, and antibody detection. 8 sh.

**VI PHYSICAL SCIENCES (Course
Prefix PY)**

ELEMENTS OF PHYSICS*

- 101 A one semester survey of basic concepts of physics including force, motion, gravity, satellites, energy conservation, momentum conservation, waves, light, sound, electricity, and atomic and nuclear structure. Prerequisite: MA 103 or high school equivalent. Two lectures and one two-hour laboratory per week. Carr. 3 sh. (Fall; Spring by demand).

GENERAL PHYSICS I *

- 103 The first semester of a year course which surveys the field of physics. Topics include measurement and error, force and motion, vectors, gravity, kinetic and potential energy, conservation principles, momentum, heat and thermodynamics. Prerequisite: MA 103 or high school equivalent. Two lectures and one two-hour laboratory per week. Carr. 3 sh. (Fall).

GENERAL PHYSICS II *

- 104 A continuation of PY 103, which is a prerequisite. Topics include waves, light and sound, electricity and magnetism, atomic and nuclear structure and particles. Two lectures and one two-hour laboratory per week. Carr. 3 sh. (Spring).

THE PHYSICAL ENVIRONMENT I *

- 111 Basic concepts of the physical and earth sciences are considered in the context of the world around us. Concepts are selected from the fields of physics, astronomy, geology, chemistry, and meteorology. Two lectures and one two-hour laboratory per week. Eby. 3 sh. (Fall).

THE PHYSICAL ENVIRONMENT II *

- 112 A continuation of PY 111, which is not a prerequisite. Two lectures and one two-hour laboratory per week. Eby. 3 sh. (Spring).

PRINCIPLES OF PHYSICS I *

- 201 An introduction to physics recommended for students concentrating in the sciences and possessing appropriate mathematics preparation. Topics include measurement and error, Newtonian and relativistic kinematics and dynamics in one and two dimensions, harmonic oscillators, calorimetry, heat transfer, and thermodynamics. Concurrent registration in MA 107 or 201 is recommended for students who do not possess basic knowledge of calculus. Two lectures, one demonstration-recitation, and one three-hour laboratory per week. Carr. 4 sh. (Fall).

PRINCIPLES OF PHYSICS II *

- 202 A continuation of PY 201, which is a prerequisite. Topics include electricity, magnetism, electromagnetic waves, refraction, interference, diffraction, introduction to wave mechanics, quantum phenomena, atomic and nuclear structure, and elementary particles. Two lectures, one demonstration-recitation, and one three-hour laboratory per week. Carr. 4 sh. (Spring).

EARTH AND SPACE SCIENCES *

- 212 Topics selected from astronomy, geology, meteorology, oceanography, and space science. Prerequisite: PY 101 or permission of instructor. Two lectures and one two-hour laboratory per week. Eby. 3 sh. (Spring; not offered after Spring, 1973).

ASTRONOMY I *

- 215 An introduction to the study of astronomy, Historical development, instruments, solar system, and stellar systems. Two lectures and one two-hour laboratory per week with observation sessions. O'Brien. 3 sh. (Fall).

*Course may be counted for Area IV (Laboratory Science).

ASTRONOMY II *

216 A continuation of PY 215 which is a prerequisite. Special emphasis is on stellar systems and stellar evolution. Special topics and independent study. Two lectures and one two-hour laboratory per week with observation sessions. O'Brien. 3 sh. (Spring).

LABORATORY PRACTICUM IN PHYSICS I

301 Through observation, preparation of materials, and presentation of demonstrations in introductory course laboratories, the student becomes familiar with the materials and teaching-learning situation in physical science. Carr. 1 sh. (Fall).

LABORATORY PRACTICUM IN PHYSICS II

302 A continuation of PY 301. Carr. 1 sh. (Spring).

*Course may be counted for Area IV (Laboratory Science).

METEOROLOGY

332 The physical laws and relationships that (331) describe the state of the atmosphere. Topics include the thermodynamics of the atmosphere, weather prediction, weather modification, climatology, and the effects of atmospheric pollutants. Prerequisite: Permission of instructor. Two lectures and one two-hour laboratory per week. Eby. 3 sh. (Spring).

Special reference is made to PH 308--Philosophy of Science which may be credited to science concentrations and minors providing that all specified requirements have been satisfied.

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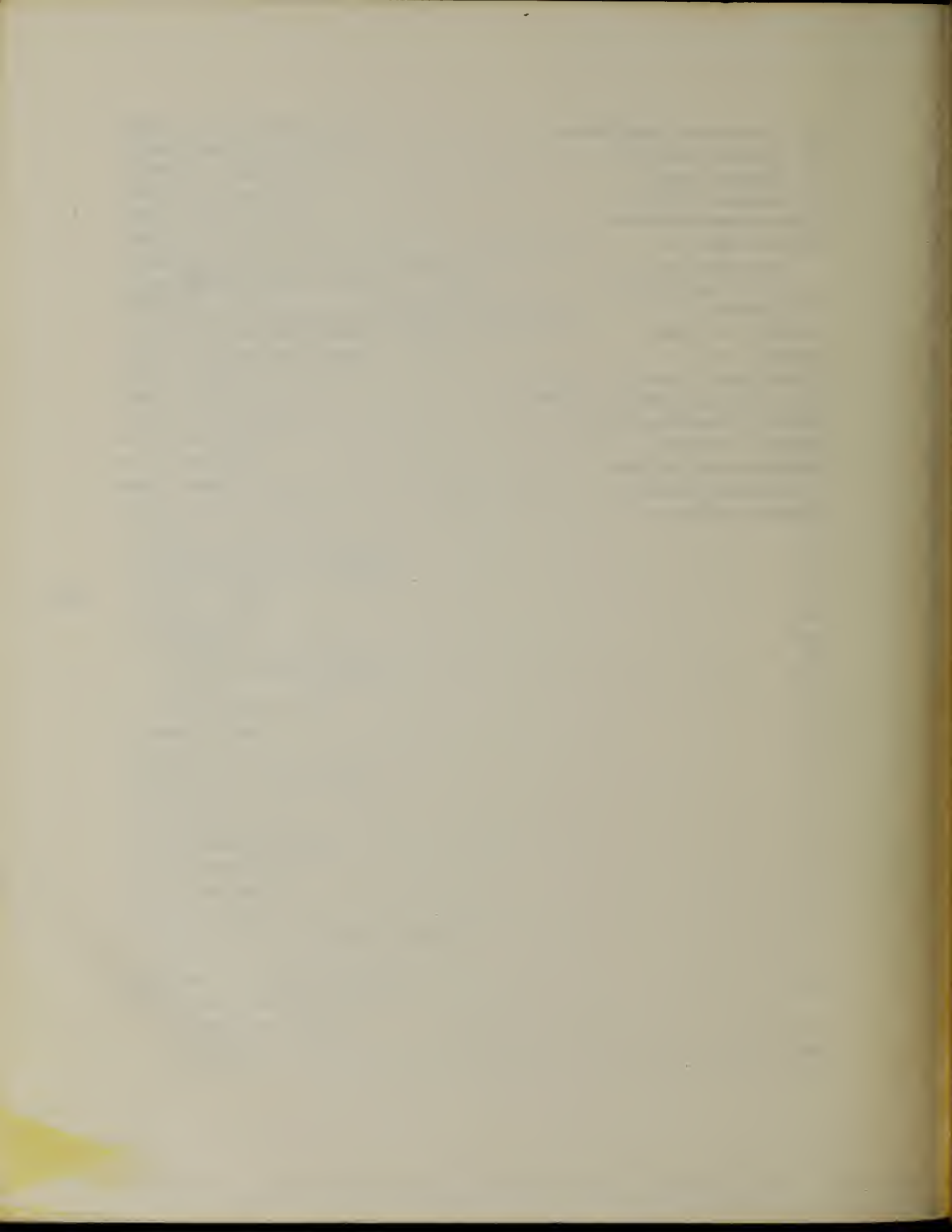
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